

Urban Combat: Is the Mounted Force Prepared to Contribute?

**A Monograph
by
Major Scott T. Kendrick
Armor**



**School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas**

First Term AY 00-01

Abstract

URBAN COMBAT: IS THE MOUNTED FORCE PREPARED TO CONTRIBUTE? by Major Scott T. Kendrick, USA, 56 pages.

The world's growing population is becoming increasingly urbanized. If recent interventions and peacekeeping efforts by the military are indications of future deployments, then the US Army must realize the likelihood of conducting military operations on urban terrain (MOUT). Urban combat is violent, destructive, and filled with ambiguity. Only well prepared and trained units will succeed in combat in the urban environment. As the Army seeks direction in organizing and preparing itself for the next war, armor and mechanized maneuver units, or the "mounted forces" have to grasp the complexities of urban combat and then decide what skills its junior leaders will need in order to accomplish the mission in future conflicts.

This monograph asks whether or not the mounted force is prepared to contribute to the next urban combat operation. The monograph compares the current and evolving doctrinal guidance, unit training and leadership development philosophies with the relevant lessons learned from recent cases of high intensity urban combat. Ultimately, the monograph seeks to define the critical skills that mounted force leaders will need to master to succeed in future urban environments. The monograph examines and analyzes four main areas. One, the paper reviews three examples of contemporary high intensity urban combat in order to understand the complexities and difficulties of urban warfare. Two, the monograph reviews current US Army doctrine and the guidance concerning MOUT. Three, the paper reviews Army unit training and leadership development philosophy. Four, it compares eclectically the mounted force's doctrine, training, and leader development with the future requirements and emerging demands of mounted leaders operating in the urban environment.

This monograph seeks to evaluate the capability of the mounted force to execute urban combat operations. The monograph concludes that the mounted force as whole is not ready to contribute to the next high-intensity urban conflict. The mounted force's professional culture must recognize the probability of future high-intensity urban combat. In order to prepare, the mounted force must adapt not only its organizational structure, but collective unit training, and leadership development philosophy as well.

Table of Contents

	Page
I. Introduction.....	1
II The Nature of MOUT and Urban Combat	7
The Battle of Hue City.....	8
The Battle of Suez City.....	15
The Battle of Grozny.....	25
Conclusions.....	32
III. Current Doctrine and Analysis.....	32
IV The Requirements and Demands of Leadership in Urban Combat.....	44
Current Leader Development Philosophy.....	45
Command and Control of Decentralized Operations.....	47
Understanding the effects of Noncombatant Population.....	48
Integrating Forces into effective Combined Arms Teams.....	50
Understand and Manage Rules of Engagement.....	50
V. Analysis: Comparison of Doctrine, Training, and Leader Development with Future Requirements.....	52
VI Conclusions and Summary.....	55
Bibliography.....	58

Chapter I

Introduction

In the future, the US Army will conduct the majority of its missions in the urban environment. The reasons for this shift are threefold: first, the increasing urbanization of populations across the globe, second, the current national military strategy's focus on shaping the international environment through stability and support operations, and third, the likelihood that future threats will emerge from or center their operations in large cities.¹

"There is a paradigm shift in third world countries from rural subsistence based economies to uncontrolled urbanization. The expected results of such a shift include over population, rapid urban expansion, and civil unrest in many regions of the world."² Furthermore, during the next fifty years the earth's population will increase from five and one-half billion to more than nine billion.³ Many optimists hope that new resource technologies and free market development will help world stability. "They fail to note that, as the National Academy of Sciences has pointed out, 95 percent of the population increase will be in the poorest regions of the world, where governments show little ability to function, let alone to implement even marginal improvements."⁴ Most of the world's population will eventually live in large urban areas because of economic opportunity. As a result, one can reasonably expect the problems of tomorrow to emanate from these urban centers.

The current National Military Strategy focuses on three tenets: shape, respond and prepare. This national strategy places an increased emphasis on stability and

¹ Sean J. A. Edwards, *Mars Unmasked: The changing Face of Urban Operations*, (Rand, Santa Monica, CA 2000), 1.

² Lapham, Curtis A. MAJ, *Colossus on Main Street: Tactical Considerations of Heavy Armor and Future MOUT Doctrine*, (Monograph, School of Advanced Military Studies, 1996), 4.

³ Robert D. Kaplan, *The Coming Anarchy: Shattering the Dreams of the Post Cold War*, (Random House, NY 2000), 22.

⁴ Ibid.

support operations (SASO). Recently, America's national leaders have tasked the Army to both shape the environment and respond to regional crises. The Army has promoted stability through peacetime military engagement and deterrence. The shaping portion of the NMS deters aggression by developing international relationships and assisting those institutions that reduce and prevent conflict. The Army's role in this strategy is to assist in the mitigation and neutralization of the causes of war and threats to stability.⁵ Typically, these post-Cold War missions center on urban areas with large populations, such as Bosnia and Kosovo.

The respond portion of the NMS requires the Army to operate and succeed across the full spectrum of crises. Recently, the Army's involvement has been in small-scale contingency operations (SSC). Some examples of these SSCs are Somalia, Haiti, Bosnia, and Kosovo. These small-scale contingency operations have required the Army to operate amongst a large population in urban terrain. In the future, the Army can anticipate not only peacekeeping and peace enforcement operations in urban areas, but high intensity conflict as well.⁶ The Army's doctrine states that, "MOUT is expected to be the future battlefield in Europe and Asia with brigade and higher level commanders focusing on these operations."⁷

Future threats will operate from urban terrain in order to negate US technological advantages, subject US forces to asymmetric attacks, and gain worldwide exposure. Potential adversaries will see urban warfare as a feasible asymmetric approach to combating the US military.

There is a worldwide perception that the American public has unreal expectations of modern warfare and an extremely low tolerance for casualties. "Such

⁵ Department of Defense, CJSC, *National Military Strategy*. (Washington, D.C., United States Government Printing Office, 1997), 11-17.

⁶ Ibid.

⁷ Department of the Army, *FM 90-10-1 An Infantryman's Guide to Combat in Built up Areas*, (Washington, DC:, United States Government Printing Office, 1993), 1-1.

sensitivity becomes an Achilles heel because inflicting sufficient number of American casualties has the potential to undermine U. S. domestic political support."⁸ Therefore, military operations on urban terrain or MOUT present potential adversaries with both physical and political cover. The physical cover of urban terrain limits the effectiveness of tanks, attack helicopters, fire support, intelligence sensors, and communications, and therefore negates or mitigates US tactical and technical advantages. The political cover is provided by the with strict rules engagement imposed when fighting an enemy operating among noncombatants, the need to preserve, fragile city infrastructure to support a large noncombatant population both during operations and to ensure post combat success, and the presence of the international media that will accompany any United States operation in the future. This political cover can potentially neutralize the US will to operate aggressively and effectively in urban terrain. Taken together, both these types of cover help to aid the adversary's chances for success.⁹ Due to these changes in the world, the future employment of US forces, across the continuum of conflict in urban terrain is unavoidable and inevitable.

Warfare in urban terrain is chaotic and violent. Most of the critical decisions and decentralized actions occur at the lowest levels of organization. Urban warfare is extraordinarily destructive. In WW II, during the battle of Stalingrad, some maneuver divisions suffered as much as fifty- percent combat losses in less than two weeks.¹⁰ In Vietnam, during the Tet offensive, the daily casualty rates for U. S. Marines in Hue exceeded those of the most vicious days fighting during the assault of Okinawa in WWII.¹¹

Urban warfare is vague and ambiguous. In many instances during the battle of

⁸ Edwards, *Mars Unmasked*, xi.

⁹ Ibid.

¹⁰ Russell W. Glenn, *Marching Under Darkening Skies, The American Military and the Impending Urban Operations Threat*, (Santa Monica, CA RAND 1998), 1.

¹¹ Ibid., 2.

Grozny, the Russian forces found it difficult to determine the adversaries from the noncombatants. Urban operations are extremely difficult to command and control. In the battle of Suez City, the Israelis discovered that warfare in cities requires flexible plans, solid SOPs, and a clear commander's intent. After the Yom Kippur War, the Israelis learned to train in the same posture as they fight, such as maneuvering with the hatches closed to survive Egyptian sniper fire.

In urban operations, US and allied forces are constrained by rules of engagement (ROE) while the enemy often operates without regard for the effects on the local populace and collateral damage. In Hue City, the NVA and Viet Cong systematically murdered over 2000 noncombatants. In the urban environment, war is truly hell. Therefore, US forces operating in urban terrain will require enormous resources, unique preparation, and rigorous training in order to be successful¹²

Success in urban warfare requires that leaders be competent and units prepared for this most arduous and complex of environments. The branch specific schools and centers as well as the Army's professional education and training system focus primarily on scenarios fashioned in the image of the Cold War to develop the leadership skills of junior and field grade leaders. Today's mounted warriors need a broader skill set to succeed in the ambiguous conflicts of the post-Cold war era. Not only do mounted force leaders have to know how to train combined arms units, but also have to master emerging requirements such as fighting highly decentralized operations governed by stringent ROE. Additionally, leaders have to understand how information operations (IO), the dynamics created by the presence of noncombatants and the role of the media can effect their operations on the urban battlefield. Mounted force leaders must make correct decisions quickly and instinctively in rapidly changing situations that define urban combat. They must understand that their execution of tactical operations can have

¹² Many of the contemporary authors such as Glenn and Edwards, describe urban combat as the worst environment in which to fight

far-reaching strategic affects. The armored and mechanized force must be mentally prepared, doctrinally trained, and organizationally postured to conduct combat operations in this environment.

Current US doctrine states that, unless specifically directed to conduct operations in an urban environment, mounted forces should avoid or bypass urban areas in the offense and clear them with infantry later.¹³ As a result, the Army has trained its mounted force leaders to avoid urban areas because it reduces the speed of attacks or pursuits, restricts maneuver, and negates the direct fire standoff and survivability of contemporary platforms. Yet, because of the changing nature of societies around the world and the concurrent migration toward urban centers, the key terrain on future battlefields is becoming predominantly urban. Furthermore, the future threat will try to reduce the US advantages in technology, weapons lethality, and protection by basing their operations in urban and restricted terrain, seeking to draw US forces into an urban battle at the earliest opportunity.¹⁴ If the mounted force is to contribute, then it will have to fight in this environment or two basic reasons. First, for the foreseeable future, the mounted force will constitute at least 50% of the maneuver force and, if commanders are to apply overwhelming combat power, then armored and mechanized forces will have to fight in urban terrain. Second, the mounted force may not have an enemy willing to fight in open terrain, because our potential opponents will undoubtedly choose not to challenge the US where its strengths lie. Future threats may attempt to void our advantages by fighting in urban terrain. If the Army of tomorrow is to force a decision and serve as a viable tool to impose the nation's will, it must conduct operations against adversaries and their bases of support, which will be in cities.

Armor and mechanized forces conducting MOUT will have to be capable of

¹³ Department of the Army, *FM 90-10 Military Operations in Urban Terrain*, (Washington, D.C: United States Government Printing Office, 1979), 1-1.

¹⁴ Edwards, 2.

executing across the full spectrum from peacekeeping operations to high intensity conflict. The transition from one part of the spectrum to another may occur quickly if not instantaneously. Urban terrain is where tomorrow's battles or operations to prevent conflict will take place. The mounted force's leadership and organizations have to be mentally ready, taught through specific and detailed doctrine, and prepared through relevant and realistic training. Consequently, this monograph seeks to answer the question: Is the mounted force prepared to contribute to the next urban combat operation?

The framework of review, investigation and analysis in this monograph will examine four focus areas. First, the reader must understand the necessity of preparing for operations in the urban environment. Current trends indicate that the US Army will operate in a MOUT environment in the future more often than in the past. Second, the paper reviews three examples of high intensity urban combat in order to derive a deeper appreciation of urban warfare's complexities and difficulties. Third, the monograph reviews current US Army doctrine and the guidance concerning MOUT. Fourth, the monograph undertakes an examination of Army unit training and leadership development philosophy. Finally, the monograph compares doctrine, training, and leader development with the future requirements and emerging demands of mounted leaders operating in the urban environment.

This paper seeks to evaluate the ability of the mounted force to contribute in future urban combat operations. The monograph compares the current and evolving doctrinal guidance, unit training and leadership development philosophies with the relevant lessons learned from recent cases of high intensity urban combat. The purpose is to determine if Army doctrine addresses the current requirements and is evolving to support the future demands of leaders and units as they prepare for future urban operations. The author will examine the Army's current and evolving doctrine from its

capstone document FM 100-5, *Operations*, through the more focused FM 90-10-1, *An Infantryman's Guide to Combat in Built-up Areas*, in order to determine the efficacy and relevance of current and projected doctrine. An examination of contemporary experiences of high intensity urban combat, including the battles of Hue, Suez, and Grozny, serve as the basis for the evaluation of emerging doctrine and the requirements for leaders and units executing urban operations.

The Army has a solid history of incorporating the lessons learned from previous experiences of combat and conflict. However, some respected authors, such as Russell Glenn see a less than bright future for the Army as it prepares for the next war. Glenn writes: "...in the area of urban warfare it [the US Army] seems to be overlooking the lessons of history, current readiness shortfalls, and a future that offers not the potential but the assurance of both international and domestic urban operations."¹⁵

The ultimate purpose of this monograph is to examine the skills mounted leaders will need to master in order to be successful in the urban battles of the future. The author also hopes to foster a professional discussion on the need to prepare the Army's future leaders for operations in urban terrain in order to preclude Mr. Glenn's assertions from becoming reality.

Chapter II

The Nature of MOUT and Urban Combat

The traditional, possibly soon to be considered classical, vision of warfare is one of large conventional forces opposing each other with tanks and infantry, supported by engineers, artillery, attack aviation, and close air support. In this concept of war, which has dominated US army doctrine and military thought since World War II, combined arms forces engage each other over open, rolling or at least terrain unencumbered by

¹⁵ Glenn, *Marching Under Darkening Skies*, 1.

large urban areas. Although this style of warfare is very difficult to orchestrate and requires great skill and training to perfect, it may no longer be the immediate concern for the US Army. As stated previously, the urban terrain is more likely to dominate the next battlefield. The urban battlefield with its unique environment places different demands and requirements on commanders, leaders, soldiers and units. The Nation's leaders will expect the Army to perform well in this environment, whether it has prepared itself or not. Robert F. Hahn and Bonnie Jezior expound on this idea:

"...future urban operations will not be limited to stability operations against lightly armed paramilitary forces. The Army will fight real wars against real enemies in real cities. The Army must prepare to fight and win these wars with the same level of effectiveness that is expected when engaging a large enemy armored force arrayed... across desert sands."¹⁶

There are many recent examples of conflict occurring in or near urban terrain. The battles for Hue City, Suez City, and Grozny are good case studies of high-intensity combat in urban terrain. The potential combatants and the conditions within an urban environment are very diverse and complex. An analysis of these cases demonstrates the traditional and emerging requirements, demands, and skills for combat leaders in MOUT. These battles demonstrate the extreme chaos, tempo, and difficulties of urban combat. They also highlight the cost of not preparing for and understanding the affects of the urban environment on the American way of warfighting.

The Battle of Hue City, 1968

The battle of Hue began on January 31, 1968. Hue was one of many provincial capitals attacked by the North Vietnamese (NVA) and Viet Cong (VC) during the Tet Offensive. Both US Marine Corps and the Army of the Republic of Vietnam (ARVN) units fought against the communist during the battle.

As the old capital of imperial Vietnam, Hue was significant culturally as well as economically. In 1968, the city was the capital of the Thua Thien Province located in

¹⁶ Robert F. Hahn and Bonnie Jezior, "Urban Warfare and the Urban Warfighter of 2025" *Parameters*, XXIX no. 2, (Summer 1999), 85.

northern South Vietnam. Hue's most significant architectural site, the Imperial Citadel, dominated the city center. The Citadel, which consisted of large stone walls and surrounded by a moat, covered one-half of the urban area. The Perfume River flows south of Citadel and most of the city. At the time of the battle, about 140,00 people lived in and around Hue.¹⁷ The Americans and South Vietnamese considered Hue militarily significant because it was a logistical crossroads for water, rail, and road traffic.

In preparing for the attack, NVA and VC forces infiltrated the city on 29 and 30 January 1968. Then, on 31st, the combined communist forces attacked Hue with over 5000 soldiers. Besides the attack on Saigon, the NVA attacked Hue with more troops than any other city or objective during Tet. The NVA and VC planned to attack as many as 314 immediate objectives on the first day's attack in Hue¹⁸.

The NVA quickly overran and seized most of the city. However, they failed to seize the 1st ARVN Division Headquarters inside the Citadel and the US Military Assistance Command, Vietnam (MACV) compound located just south of the Perfume River. As the isolated US and ARVN forces held out, the local ARVN and US commanders quickly ordered relief forces to the area. These hastily assembled US forces in Hue arrived later the same day. The relief force consisted of two US Marine infantry companies accompanied by four tanks. With little planning, coordination or guidance, the Marines attacked north into the city and eventually reached the surrounded MACV compound.¹⁹

However, in the west, the ARVN relief forces faced heavy contact in route to Hue and did not arrive until the next day. Initially, three ARVN infantry battalions and a cavalry squadron penetrated into the city on 31 January and 1 February. The intense

¹⁷ Keith W. Nolan, *Battle for Hue: Tet, 1968*, (Novato, CA: Presidio Press, 1983), 3-4.

¹⁸ Hammel, 28-29

¹⁹ Ibid.

street fighting continued almost non-stop for two weeks. It took the ARVN forces until 13 February to seize the airfield within the Citadel grounds. The Marines attacked north to clear the south bank of the Perfume River and then continued north to link up with ARVN forces engaging the NVA forces within the Citadel. Combat raged throughout Hue. The heaviest fighting took place within the Citadel walls. Very early on in the battle, US forces operated under strict rules of engagement (ROE) because of the noncombatant civilians and cultural significance of the city itself. Not only were the Marines initially unprepared and not organized for urban combat, they had to deal with political and humanitarian constraints. Therefore, the allies could not use tactical close air support or artillery within the city. Later, the chain of command lifted this restriction on the 13th due to the intensity of the fighting. In contrast to the US experience, the NVA and VC commanders never placed restrictions governing their combat tactics at any point.²⁰

On 16 February, the remaining senior enemy commander wanted to withdraw from Hue City. Although his immediate military headquarters denied his request, the NVA commander began withdrawing his troops. He evacuated the city three days later on 19 February. However, the fighting continued until ARVN and Marine troops defeated the last NVA units defending within the Citadel on 24 February. Finally, on 25 February, the combined allies destroyed the last of the enemy resistance in the city and concluded the battle for Hue.²¹

The fighting lasted for twenty-five days and reduced the city to ruins. In the end, casualties totaled 1525 ARVN soldiers and Marines, along with approximately 5000 communists.²² The fighting caused hundreds of noncombatant casualties. Tragically, the NVA and VC forces executed 2000 of Hue's noncombatant civilians. Before the Tet

²⁰ R. D. McLaurin et al, *Modern experience in City Combat*, (Springfield VA: Abbott Associates, Inc., March 1987), 67.

²¹ Ibid.

²² Ibid., 68.

offensive, the Marine infantry and armored forces supporting Hue did not train or prepare for urban combat, or ‘city-combat tactics.’²³ The Marine Corps trained some of the more senior Marines in urban fighting as recruits, but not after their basic training. Surprisingly, the Marine Corps deleted urban warfare training from its infantry program even before the Vietnam conflict began.²⁴ The battle for Hue exposed this institutional and doctrinal shortcoming very quickly. This battle provides a good example for the basis of doctrinal development.

The 2/5 Marine Regiment officer's preparation for urban combat was typical of most units at the time. The battalion commander had not trained for urban combat since he was a lieutenant, which was before the Korean War. In fact, “the last time the Marines had fought in a built-up area had been in September of 1950, in the liberation of Seoul, Korea.”²⁵ While hastily preparing to depart with his unit for Hue, LTC Cheatham, the 2/5 Commander, found a few MOUT manuals in a footlocker in the 5th Marine command post.²⁶ The tactics and techniques he discerned was that the best way to fight MOUT was to gas the enemy, blow things up, and clear out the ruins.²⁷

The use of armor in Hue was instrumental in the initial defense, relief, and recapture of the city. Although the armor in Hue proved decisive, the lack of MOUT and combined arms doctrine and training created a steep learning curve and many casualties during the early fighting. Initially, the attacking allied forces sent to relieve the ARVN and MACV HQs were not prepared or organized to fight in urban terrain.

The allies' initial attacks into Hue were failures. One ARVN airborne battalion attacked without armor support to relieve the 1st ARVN Division HQs. The NVA quickly defeated the paratroopers. Then, the ARVN tried attacking with an armored

²³ Hammel, 133-135 LTC Cheatham vaguely recalled a British military film on conducting operations in a city.

²⁴ Ibid.

²⁵ Eric M. Hammel, *Fire in the Streets: The Battle for Hue: Tet 1968*, (Chicago IL: Contemporary Books, 1991), 97.

²⁶ Ibid., 133-135.

²⁷ Ibid., 134.

cavalry squadron without the infantry. The NVA forces foiled this attack three times. On the final attempt, the paratroopers and the armor task organized and attacked together. Working as a combined arms team, they penetrated to the HQs compound, quickly established a defense, and successfully defeated repeated NVA attacks. In the south, the US Marines made the same tactical mistakes. Initially, the NVA defenders defeated the Marine infantry attacks. Subsequent Marine attacks by infantry and tanks fought through in the south and reached the MACV compound.²⁸

Surprisingly similar to the ARVN, in the fighting that followed the Marines reverted to fighting with armor forward without infantry support. This unsound tactic left the tanks vulnerable and usually resulted in the NVA disabling the tanks with rocket-propelled grenades (RPG). In the early fighting, many tanks suffered multiple RPG hits because infantry forces did not overwatch the tanks. Each tank that supported the 1/5 Marines received ten to twelve hits apiece.²⁹ The light armor was vulnerable to these rockets. Obviously, the armor could not continue to absorb these unchallenged RPG attacks. On the other hand, infantry attacks against NVA strong points proved costly without armor support. The heavy friendly casualties and destroyed equipment were due to poor MOUT training and organization. Therefore, the Marines developed their own combined arms tactics and techniques. Eventually, executing in combined arms teams in Hue became routine, after the Marines underwent an untimely and painful organizational change all the while in contact.

As the Marines gained experience, vehicle commanders would identify visually targets by dismounting from the vehicle or from designations over FM radio. The Marine infantry provided security and covering fire as the tank moved to a firing position. Then, the tank engaged the target and moved for cover while overwatched by the infantry. After adopting this tactic, the 1/5 Marines did not lose another armor

²⁸ Ibid., 62-63.

²⁹ Ibid., 301.

vehicle³⁰ Ultimately, the Marines used many organizational variations involving infantry platoons and squads, tank sections, and combinations of individual tanks such as the M48s, M41s, and Ontos. The junior leaders had to learn to fight combined arms platoons and sections *during* their experience.

After Hue, the Marine leadership felt the tanks and Ontos were their most critical assets.³¹ The light infantry could only take strong points with heavy direct fire support. Armor was the only weapon capable that could defeat the communist strongpoints in Hue.³² Clearly, armor had its place, but only as a part of a combined arms team.

The Marines in Hue also used armor to solve other problems of urban fighting. Mounted units helped the infantry forces with transportation missions that are traditional challenges for light forces. Armored forces actually made routes like bulldozers through the city.³³ The Marines used armored vehicles to secure routes for casualty evacuation and movement of supplies. When the initial ROE was in effect, tanks provided the smoke normally provided by indirect fire and air support. The tanks fired smoke to mark enemy positions, conceal tactical movement between buildings, and protect engineers conducting demolition activities. This action resulted in dramatic increases in logistical requirements to support the mounted force.³⁴

Conclusions

While the Marines learned many lessons from the urban fighting in Hue, at least five remain relevant to the Army today. First and most importantly, the Marines went into Hue without an adequate MOUT doctrine as well as no emphasis on MOUT training. After initial failures, the Marines learned that successful MOUT operations require a

³⁰ Ibid., 152.

³¹ Ibid., 300.

³² Ibid., 152.

³³ Al Mosher, MAJ, "*Light Armor MOUT Doctrine: Imperative Change or Business as Usual?*" (SAMS Monograph, US Army Command and Staff College, Ft. Leavenworth, KS 1993), 18.

³⁴ Ibid. MAJ Mosher found this in Steven L. Parish's, "Light Tap with a Strong Arm: Doctrine and Employment of Marine Corps Armor from 1965-75," *Armor* (September-October 1992), 20.

combined arms approach.

Second, before Hue, the Marines had no emphasis on MOUT training. In fact, the Marines deleted any sort of a MOUT training program prior to Vietnam. The Marine leadership found that trying to “train-up” by reading antiquated manuals shortly before attacking was ineffectual.

Third, the Marines failed to train their leadership for urban combat. The Marines did not have a formal professional education or training philosophy for the officer corps, enlisted soldiers, or units in the field. A combined light infantry and armored force has to have adequate preparation. Therefore, the Marines attacking into Hue were improperly organized, doctrinally unfamiliar with MOUT, and lacked leader and unit training.

Fourth, the Marines had to deal with the constraints of ROE, driven by the humanitarian concerns of a large noncombatant population and the political concerns over the cultural significance of Hue City itself. The Marines, fighting in a limited war, faced the difficulty of fighting an enemy conducting total war (and in some respects approached the Clausewitz' theory of absolute war.)³⁵ The NVA and Viet Cong fought with no constraints.

Fifth and finally, in the realm of urban tactics, the Marines saw that armor and infantry are inseparable. Tactics, plans, and organizations have to be agile and flexible. The Marines found that rigid philosophy of missions and roles for separate branches ensures failure. Armor support of light infantry in urban operations was essential because of the need for direct fire support. The Marines found infantry has to protect the tanks. There must be a combined arms approach to doctrine and fighting. Integrated together, the two arms proved far more effective than either arm operating individually.

³⁵ Carl von Clausewitz, *On War*, Edited and translated by Michael Howard and Peter Paret (1976 Princeton University Press, NJ), 579-581.

The Battle of Suez City, 1973

The battle of Suez City occurred in the final days of the Yom Kippur War, between the armed forces of Israel and Egypt in October 1973. The action occurred as Israeli ground forces attacked Suez City in an operation to encircle and isolate the Egyptian Third Army. By seizing Suez City, Israel sought to expand or at least consolidate territorial gains before the United Nations (UN) observers arrived to enforce a politically brokered cease-fire agreement. Although the Israeli Defense Forces (IDF) attacked with ample combat power consisting of armor and light infantry units supported by artillery and air support, the defending Egyptian forces won the battle. The battle of Suez City is a good example of an attacking force executing an operation with poor urban warfare doctrine. The IDF can trace its defeat in Suez City back to its own MOUT philosophy.³⁶

Suez City is located near the southern access point of the Suez Canal. The city is on the West Bank opposite of the Sinai Peninsula. Normally a city of 250,000, due to a relocation plan, the population of Suez City was approximately 80,000 during the Yom Kippur War.

The city has several subdivisions. They are the central city, an industrial zone, and port facility. The central city lies to the north of the other two sectors and has a modern road network. The major roads are wide, but the perpendicular side streets are typically no more than constricting alleyways. The main avenue of approach, Route 33, runs through the middle of the city. The industrial zone is to the southwest of the central city, while the port facilities serving the Suez Gulf are located south. The construction of Suez City's buildings varies between two and three story stucco residences to five to eight story concrete apartment complexes.³⁷

The MOUT doctrine that the IDF took into the October War had its roots in the Six

³⁶ Al Mosher, MAJ, "*Light Armor MOUT Doctrine: Imperative Change or Business as Usual?*" (SAMS Monograph, US Army Command and Staff College, Ft. Leavenworth, KS 1993), 20.

³⁷ R. D. McLaurin and Paul A. Jureidini, "*Modern Experiences in City Combat*", (US Army Human Engineering Laboratory, Aberdeen Proving Ground, MD), 84.

Day War of 1967. During the Six-Day War, Israel conducted its armored attacks in the Golan and Sinai on primary avenues of approach. Typically, the Israeli forces remained mounted throughout the attack. Before the Six-Day War, Israel trained and thoroughly prepared for urban combat. In 1967, the IDF conducted successful combined arms attacks in urban terrain. Israeli ground forces attacked and seized Jerusalem with tanks leading, and infantry following far in the rear. The relatively easy victories in urban terrain in the Six-Day War led to the philosophy of attacking urban terrain primarily with armor pure forces. In the attack of Suez City in 1973, the Israeli operations order directed that if they received heavy artillery fire, the mounted forces would attack alone.³⁸ These unchallenged accomplishments in urban warfare in 1967 made the Israelis blind to the prospect and problems of fighting a determined enemy on urban terrain.

During the six-year period between the Six-Day War and the Yom Kippur War, the IDF fostered two divergent doctrines on urban warfare. The Israeli success in seizing Jerusalem and smaller urban areas during 1967 led to a doctrine sponsored by senior armor force leaders armed with their recent and successful urban experiences. This armor-centric doctrine developed by the influential armor leadership, relied heavily on the use of pure armor in urban terrain. On the other hand, the IDF light and mechanized infantry subscribed to the traditional IDF doctrine that stressed infantry as the primary executor of city fighting. The two branch-centric and mutually exclusive doctrines were incompatible. This doctrinal fracture resulted in a disregard for combined arms training between the wars.³⁹

The IDF armor community's MOUT doctrine for attacking an urban area prescribes a three-phase scheme of maneuver. In the first phase, armored units bypass the built-up area and block all the avenues of approach in order to isolate the urban area. During the

³⁸ Glenn F. Rogers, "The Battle of Suez City", *Military Review* (November 1979), 29.

³⁹ R. D. McLaurin and L. W. Snider, *Recent Military Operations in Urban Terrain*, July 1982, 4.

second phase, forces maneuver to encircle the built up area. Armor forces occupy key terrain that influences or dominates the area outside the city. If achievable, forces seize the key terrain or structures inside the city. In the third phase, the Israeli forces would attack with a quick and decisive armored thrust in order to capture the city.⁴⁰

According to the Israeli doctrine, IDF armored unit commanders should alternate the movement of tanks, armored personnel carriers (APCs), and engineers within an armored column. Then, the armored columns moved on parallel avenues of approach in order to achieve a mutually supporting high volume of fire. The doctrine directed the tanks to fire on the lower levels of buildings and APCs on the upper levels.

Additionally, the doctrine directed columns to disperse within the city, maneuver toward key objectives, and identify pockets of resistance. The infantry forces followed the armor forces and attacked to clear the isolated pockets of resistance. The purpose of this three-phase armor concept was to protect the advancing column, inflict heavy losses on the enemy, and eliminate the will to resist.⁴¹

The light and mechanized infantry doctrine and trained with the dismounted infantry attacking as the main effort when conducting MOUT. Armor supported the infantry with fires from key terrain outside the urban area or maneuvered to isolate the area or block reinforcements. The problem with both doctrines was that each branch had an independent and exclusive task. The faulty armor doctrine was more influential and therefore guided IDF planning for the attack on Suez City.⁴²

Egyptian forces planned for the defense of Suez long before the 1973 war began. Egyptian authorities evacuated two-thirds of the population in the years before the war.⁴³ They established a civil-military government to administer the remaining populace. The Egyptian government permitted the essential civilians to remain and then trained and

⁴⁰ Ibid., 15.

⁴¹ Ibid., 51.

⁴² Mosher, 20-21.

⁴³ R. D. McLaurin and Paul A. Jureidini, 84.

organized them to help defend the city. The civil-military government created a 2,000-man militia, led by a retired Egyptian Army officer. The Egyptian Army engineers preset demolitions. Militia and regular army units chose observation posts for scouts and artillery observers, while other units established communication and designated pre-stocked supply centers.⁴⁴

Many of the buildings had flat roofs and porches that provided good individual and crew-served anti-tank weapons positions. The city's buildings, layout, and varying street width provided good terrain for a viable defense. Three main avenues of approach entered Suez City through three separate access gates. From the northwest, route 33 enters through to the city's center. Route 33 is a modern highway that varies in width from 75 to 200 meters. From the North, the Ismailia highway runs through the northern gate. The Ismailia highway intersects Route 33 near the center of the city. The Adabiah highway enters the city through the southern gate and is the only avenue of approach which provides access and maneuver into and through Suez City's industrial area.⁴⁵ The Egyptian soldiers tied their defensive scheme into Suez City's urban terrain and made it work to their advantage.

The Egyptian Army completed their defensive preparations after the war began. The Egyptians defended within the city with two mechanized infantry battalions, an anti-tank company, and a few T54/55 tanks.⁴⁶ The militia Army units established engagement areas along the three high-speed avenues of approach into the city. They positioned the equivalent of two tank battalions in defensive positions overwatching potential crossing sites over the Suez Canal northeast of the city. By the time the Israelis attacked, the Egyptians established a well-prepared defense using the urban terrain to their advantage.

The Israelis attacked to seize Suez City for several important reasons. First, the city

⁴⁴ Ibid., 84-85.

⁴⁵ Rogers, 30.

⁴⁶ Ibid., 32.

warehoused large quantities of supplies for the Egyptian Third Army and was tactically important because of its location along the line of communication. For the Israelis, seizing Suez City and cutting the line of communication was key to encircling the Third Army. Second, Suez City's location in conjunction with its port facilities at the southern entrance to the Suez Canal made the city strategically important. Third, Suez City had political significance. Controlling Suez City and the surrounding area would give Israel greater negotiating influence as the cease-fire deadline approached. Finally, the Israelis wanted to seize control of Suez City in order to prove its claim of encircling the Third Army.⁴⁷

Even on a very short time schedule, the Israeli planners thought they could easily seize Suez City. After the Israeli ground forces assaulted across the canal, the Egyptians were unable to counter-attack anywhere along the West Bank. The Israeli intelligence officers mistakenly determined the Egyptian forces were in disarray and retreat. Therefore, the IDF decided to attack to seize Suez City. The senior IDF leadership ordered MG Avraham Adan to capture the city "provided it did not become a Stalingrad situation."⁴⁸

In only a few short hours, MG Adan quickly assembled his maneuver and supporting forces and prepared to attack. The Israelis apportioned the 217th and the 460th armor brigades for the attack to seize Suez City. Neither of these brigades had organic infantry support. MG Adan task organized the brigades with two company-sized paratrooper units. Additionally, he committed an armored infantry battalion, a scout company, and a company-sized reconnaissance battalion to the mission. As for the mounted forces, each brigade fielded 108 tanks and 102 half-tracks and APCs. Three artillery battalions would provide fire support for both of the armor brigades.⁴⁹

⁴⁷ McLaurin and Snider, 8.

⁴⁸ Avraham Adan, *On the Banks of the Suez: An Israeli General's Personal Account of The Yom Kippur War*, (Jerusalem: Presidio Press, 1980), 427.

⁴⁹ McLaurin and Snider, 85.

The Israelis initiated the operation in the morning of 24 October 1973. First, the 217th Armor Brigade conducted reconnaissance by fire into Suez before the attack. The Egyptians did not return fire so the Israelis incorrectly determined the defending forces were weak. The Israelis failed to conduct thorough reconnaissance of the enemy.

Next, the Israeli forces tried to encircle the city. For the most part, the Israelis succeeded except in the North where they encountered rough terrain and stiff resistance. Afterwards, the 217th Brigade initiated the attack from the northwest. The 217th scheme of maneuver mission was to attack south astride Route 33 to seize three sequential objectives of road intersections with the city. The 460th Brigade attacked from the south of Suez to seize the industrial area and port facilities. Ultimately, the plan directed the 460th to link up with the 217th near the southern-most road intersection in the city center.

Just as the Israeli armor-centric doctrine directed, the 217th began the attack without the support of their attached paratroop infantry. As the fight unfolded, the Egyptians successfully blocked the 217th for two hours with tank and anti-tank fire from the city perimeter. The 217th made no progress until it incorporated the infantry into the fight. The 217th leadership found inserting the infantry very difficult. The 217^{th's} leaders tried to re-task organize *after* the brigade made contact with the Egyptian defenders. Just as the US Marines at Hue had done five years earlier, the Israelis had to *transform* their organizations and tactics while in contact with a determined enemy. Additionally, the brigade had great difficulty reorganizing with the infantry because the paratroop infantry had never trained with armor. The predictable result of the initial confusion and lack of training was that the brigade never fully organized into combined arms teams. The Israelis formed an integrated column, with an armored battalion leading, followed by the two paratrooper companies, and then the scout company.⁵⁰

As the 217th attacked, one of the armor battalions maneuvered south into the city at

⁵⁰ Ibid.

high speed. The rate of attack created 500-meter gaps between each of the separate maneuver units. Despite the distance between forces, the Israelis quickly seized the initial objective at the first major intersection. As the maneuver south continued, the lead armor battalion entered the second of the three major intersection objectives. Without warning from the scouts or support of their infantry, the 217th's armor maneuvered right into the Egyptian engagement area. The Egyptians quickly disabled or destroyed the first and last vehicles in the column with RPGs at the city gates. The surviving vehicles attempted to move off Route 33 and on some of the alleys and streets without any unity of effort. Within an hour, the Egyptian gunners disabled or destroyed most of the Israeli tanks and APCs. Without the infantry support to overwatch the tanks, the Egyptian defenders attacked the Israeli mounted forces from 360 degrees. The Israeli vehicle commanders fought with their hatches open as they had in the desert. In fact, the Egyptians killed or wounded all the Israeli armor battalion's tank commanders.⁵¹ Fighting in the hatch or "buttoned up," with hatches closed forces a trade off between maintaining situational understanding or C2 and surviving. The Israelis chose the former and paid the price. After the Egyptians killed the tank commanders, command and control of the armor battalions became temporarily impossible. Requests for help and medical attention filled the battalion's command nets.

As soon as the armor battalion made contact, the paratroop company dismounted. Although, they followed their doctrine, the infantrymen were over 500 meters north of the Egyptians, who were busy destroying the mounted forces. Recognizing this mistake, the 217th deputy brigade commander ordered the paratroopers to remount and maneuver closer to the armor battalion. However, the Israelis had lost precious time. The paratroop company could not move close enough to dismount and get into position to counter-attack the Egyptians. The dismounted infantry were simply too slow to save the tank battalion. Additionally, because of the breakdown in communications the

⁵¹ Ibid.

paratroopers succeeded driving right into the engagement area and then dismounted while in contact. After surviving this initial contact, the paratroopers secured buildings near the second road intersection, but the Egyptians isolated them from the rest of the brigade. Eventually, the armor battalion commander regained control of his remaining force and maneuvered to the third and final objective. Throughout the fight at the second road intersection, the 217th Brigade's infantry were unable to get into the fight and support the mounted forces.

The third and fourth elements of the brigade maneuvered far behind the lead paratroop company. The second of the two paratrooper companies dismounted their vehicles even further back than the first company did. The second paratroop company maneuvered south on foot and never remounted. Although they were the first Israeli unit postured for contact in the urban terrain, they entered an Egyptian engagement area just like the first two maneuver elements. The Egyptians blocked the Israeli paratroopers and forced them to take refuge and hasty defensive positions in close-by buildings. The final maneuver element of the 217th Brigade, the scout company, moved south independently, as had the three previous units. The Egyptian defenders, attacking by fire, inflicted heavy casualties on the Israeli scouts. Shortly afterwards the 217th's scout company retreated north in order to break contact.⁵²

As for the action in the south, the 460th met light resistance and achieved its objective by 1100 that morning. Back in the North, the Egyptian defensive scheme forced the 217th to separate into three elements. Egyptian forces encircled all three and continuously suppressed the Israelis with intense fire. This caused the mission to quickly transition from a two-brigade attack into a one-brigade rescue. The IDF ground forces tried several times to relieve the 217th's fixed forces.

The 217th commander committed his second tank battalion to the effort. The

⁵² McLaurin et al, *Modern Experiences in City Combat*, 86.

battalion's initial task was to overwatch the lead tank battalion's maneuver into the city. As the second battalion maneuvered from the north, the 460th attacked with an armored battalion from the south. The Egyptians held their ground. Again, the defenders, attacking by fire from key positions within the city, forced the 217th's second tank battalion to break contact and retreat north. The 217th tried to call in close air support, but the IDF aircraft could not identify the Egyptian targets. After a full day of city combat, the Israeli forces finally rescued their forces. The 460th's armor units eventually penetrated north into the center of Suez City. The successful link-up enabled the 217th's fixed and severely attrited lead armored battalion to retreat out of the city. After darkness, the battle paused and both of the paratrooper battalions exfiltrated north out of the city. The Israelis finally completed the extraction effort around 0500 the next morning on 25 October.⁵³

At the conclusion of the Battle of Suez City, the MG Adan's forces seized the port facilities, industrial zones, and the oil infrastructure in the southwest. On the other hand, the Egyptians maintained control of the central part of the city. Reports of Israeli casualty estimates range from 100 to 400 soldiers. The Egyptians destroyed twenty-eight Israeli armored vehicles on the 24 October and ten more on the 25th. By most accounts, the Israelis inflicted few casualties on the Egyptian defenders.⁵⁴ By any measure, the Egyptians' won a tactical victory in the battle of Suez City.

Conclusions

The battle for Suez City provides four important insights and lessons for armor and light infantry MOUT operations. First, the Israelis failed to develop a single doctrine for urban combat. Mounted and dismounted forces must have a doctrine that focuses the efforts of both branches rather than excluding one another.

Second, mounted and dismounted forces have to routinely task organize and train

⁵³ Ibid.

⁵⁴ Ibid.

together. Armor, infantry, engineers, and fire support cannot fight independently of one another, especially in urban terrain. The different arms have to know how to fight together. Infantry and armor are mutually supportive. The Israeli armor needed infantry overwatching for security, while paratroopers needed the armor's direct fire support against Egyptian defensive positions within the city. When these two combat arms operate cohesively, their effect produces a unique synergy. The Israelis failed to achieve this synergy because of differences in branch culture. They had two divergent philosophies concerning MOUT doctrine.

Third, the Israelis found operating with uncertainty difficult when the Egyptians interrupted the normal chain of command and communications methods by killing most of the vehicle commanders. The Israelis learned the importance of a clearly communicated commander's intent. Urban operations require de-centralized execution. Therefore, leadership has to function at the lowest levels.

Fourth, the attack suffered not only from IDF institutional problems but also from a lack of emphasis on reconnaissance and failures in intelligence. The Intelligence Preparation of the Battlefield (IPB) of an urban environment is critical and requires even more energy and detail. Combatants need to understand cultural as well as tactical IPB. For, example, if the Israelis knew that they were fighting soldiers that actually lived in Suez City during peacetime, they could have made a better assessment of the Egyptian defender's determination and will to fight. The Israelis failed in traditional IPB as well as understanding the motivation and sentiments of the enemy.

As the US Army would later learn in Somalia, the Israelis found that when an organization is not properly led, tailored and trained to fight in urban terrain, the mission can quickly change into an extraction or a rescue operation. Moreover, the Israelis failed to understand the enemy and the situation. In any environment, the individual branches have to task organize and fight as integrated combined arms teams. Just as the

Marines in Hue City, the Israelis had to *transform* their task organization while in the midst of fighting.

However, the Israelis did use armor units successfully in two ways. First, the Israelis used tanks to quickly isolate Suez City and control the terrain and avenues of approach just outside the urban area of the city. Second, Israeli armor provided effective direct fire support in Suez City's urban areas for the infantry once the two branches finally integrated and fought together.

The Battle of Grozny, 1995

The battle of Grozny occurred throughout January 1995. An untrained and poorly prepared Russian force attacked a composite defending force of Chechen regulars and guerrillas. Both sides fielded contemporary Russian weapons, however each side's tactics differed dramatically.

The city of Grozny is the capital of the Russian Republic of Chechnya. The city and its republic are in the Caucasus northwest of the Caspian Sea. Just before the battle, Grozny had a population of approximately 490,000. The city has many multiple-story buildings and industrial zones and spreads out over 100 square miles.

The genesis for the battle of Grozny began in 1994, when a Chechen opposition movement attempted to overthrow President Dudayev. In November 1994, the Russian-sponsored opposition group attacked Dudayev's forces. The attack failed and Dudayev remained president. At first, Russia denied involvement in the coup attempt. Later, the Chechens exposed Moscow's involvement and humiliated the Russian leadership by displaying several captured Russian soldiers to TV cameras. This embarrassment influenced Russian Federation President Boris Yeltsin to order troops to begin deploying into Chechnya. The Russian military planners had only a matter of days to move combat units and position logistical supplies into the Caucasus. Despite the shortage of time, the Russians deployed forces Grozny in three locations around Grozny before the end of 1994.⁵⁵

⁵⁵ Timothy L. Thomas, "The Battle of Grozny: Deadly Classroom for Urban Combat," *Parameters*, XXIX no. 2, (Summer 1999), 88.

The intense urban fighting lasted for about three weeks. The Russians eventually seized the capital, but only after paying a high price in men and equipment. However, the Chechen ability to successfully defeat the initial Russian attacks and inflict large numbers of casualties serves to reinforce the earlier lessons concerning tactical doctrine and urban combat preparedness.⁵⁶

The two opposing forces had many similarities. Tim Thomas explains how the Chechens turned their cultural understanding into valuable intelligence:

"The Chechen armed force spoke Russian, had served in the Russian armed forces, and had Russian uniforms. This made it much easier to understand Russian tactics and plans, and to use deception techniques. The Chechen force was not a typical army but rather a composite force of armed home guards (guerrillas) and a few regular forces... The Russian armed forces that attacked Grozny, while well equipped, were not the same professional force that opposed the West during the Cold War... The combat capabilities of the armed forces were low, the level of mobilization readiness was poor, and the operational planning capability was inadequate. Soldiers were poorly trained their suicide rates as well as the overall number of crimes in the force were up."⁵⁷

The volatile situation of ethnic hatred, combined with the winter weather, the poor political decision to project forces into the city without a clear objective, and the lack of readiness ensured Russians had little chance for success.⁵⁸

Despite the conditions and environment, the Russians attacked into Grozny on 31 December. The 1st Battalion, 131st Brigade was the first Russian unit to maneuver into the center of Grozny. The Russian forces initially made no contact or faced any resistance in the urban terrain. The 1/131st Bde units moved straight to their objective, dismounted their tactical vehicles, and established defensive positions inside the train station. The brigade's reserve force, remaining mounted, stopped along a side street nearby.⁵⁹

After the Russians quit moving, the Chechens attacked from all heights and directions. First, the Chechens' destroyed the Russian's lead and rear vehicles on the side streets. With this action, the Chechens effectively fixed the Russians. Without effective infantry support, the

⁵⁶ Ibid.

⁵⁷ Ibid., 89.

⁵⁸ Ibid., 89.

⁵⁹ Ibid., 95-96.

Russian tanks were vulnerable. The tanks could not elevate their weapons systems high enough to reach the tops of buildings or depress them enough in order to shoot into basements. This limitation in capability allowed the Chechens to easily destroy the tanks and APCs from above and below with rockets and grenades.⁶⁰

While the Chechen ambush destroyed the armored vehicles, other Chechen forces maneuvered to encircle and isolate the Russians occupying the main train station buildings. At first, the Chechens attacked armor without infantry support. Now the Chechens could attack dismounted infantry without armor support. The Russian 1/131st commander continued to defend and held out until 2 January. The Chechens simply and thoroughly decimated the 1/131st Brigade. By 3 January 1995, the brigade had lost nearly 800 of 1000 men, 20 of 26 tanks, and 102 of 120 armored vehicles.⁶¹

The primary Chechen urban tactic was the "defenseless defense."⁶² This technique enabled the Chechens to annihilate the Russian 1/131st Brigade during the first days of the battle. The Chechens did not create defensive strong points. They chose to remain mobile and difficult to find.⁶³ The Chechen forces established a few strong points in the form of dug-in armored vehicles and artillery for direct fire support or ambush. Normally, the Chechens used small-unit 'hit-and-run' tactics. These tactics made it difficult for the Russians to identify pockets of resistance. The Chechens found this tactic prevented the Russians from effectively massing combat power against them. The Russians piecemealed their forces because there was no traditional decisive point against which to mass combat power.

The most typical Chechen task organization for combat was a three-or four-man team. Usually, five of these teams fought together as a 15- to 20-man combat unit. "Some Chechen soldiers pretended to be simple inhabitants of Grozny, volunteering to act as guides since it was

⁶⁰ Ibid., 96.

⁶¹ Ibid., 88.

⁶² Ibid., 95.

⁶³ Ibid. Thomas cites Chechen Brigadier General Zelimkhan Yandarbiyev, who recently emphasized this point, noting that in the early fight for the city "the situation did the organizing." "Chechen Commander on Modern Separatism," *Nezavisimoye Voennoye Obozreniye*, No. 2, 22-28 January 1999, 2.

so difficult to navigate in the city."⁶⁴ Using this deceptive maneuver, the Chechens led Russian mounted forces into ambushes. After the ambush of several units, the Russian forces tried to take advantage of the Chechen ambush technique. The Russians employed an improvised tactic called "baiting", where small organizations attempted to make contact with and fix the Chechens executing the ambush. Then the Russians would attack with a larger force or with massive artillery and air strikes. Afterwards, the Chechens improvised further and incorporated a technique referred to as "hugging," whereby the Chechens made contact with and remained close to Russian forces. Hugging eliminated the Russian use of artillery because of the risk of fratricide and in many instances revealed the Russian baiting tactics. Hugging is not new. US Army forces fought against this tactic in Vietnam and later in Somalia. Close combat in urban terrain can negate technological advantages of a modern force.

In addition to hugging, small Chechen mobile units would maneuver to and dismount near a sanctuary such as a school or hospital, fire a few rounds, and quickly remount and depart. The Russians responded by counter-attacking the area around the school or hospital with artillery fire, but typically after the Chechens had fled the scene. This indiscriminate artillery quickly worked against the Russians. Chechen civilians perceived the Russian actions as pointless and negligent (if not criminal). The Russians destroyed vital facilities and needlessly endangered the Chechen civilian's lives. It did not matter that the Chechen forces had initiated the incident. The population only saw the results of the Russian's actions.⁶⁵ By failing to formulate any meaningful rules of engagement, the Russians allowed the Chechens to dominate the information war. Other Chechen techniques of executing their defensive scheme slowed the tempo of Russian maneuver. The Chechens set booby-traps virtually everywhere. Such places included doorways, breakthrough areas, entrances to metros and sewers. Additionally, Chechens set them on discarded equipment and the remains of killed soldiers. The Chechens also made

⁶⁴ Ibid., 96. Thomas state in addition, Chechen artillery observers also operated in the rear of Russian forces disguised as peaceful residents or refugees. Chechens, especially Russian-speaking women, reported on Russian s artillery spotters in the rear of Russian forces. See Armeyskiy Sbornik, No. 1 (January 1996, 37-42.)

⁶⁵ Thomas, 95.

use of command-detonated mines in conjunction with ambushes.⁶⁶

The Chechens conducted logistical operations using mobile detachments composed of one to several vehicles. These units easily moved supplies, weapons, and personnel throughout Grozny. The Chechen's mobility and their intimate and first class information of Grozny's urban terrain dramatically increased the effectiveness of their "defenseless defense" doctrine for urban combat.⁶⁷

The Russians learned quickly that they had to adapt to the urban environment. Initially the Russians planned operations in Grozny around tanks. The original Russian doctrine for mounted urban maneuver directed that tank platoons should be the lead maneuver force of the column, overwatched by infantry and supported by flame-throwers. A reserve force following in armored personnel carriers should move behind the tanks in order to support by fire against enemy combat forces positioned on second and higher of buildings.⁶⁸ Again, just as the Marines in Hue City and the Israelis in Suez City, the attacking organization had to transform while in contact.

Shortly after the Chechen ambush of the 1/131st Brigade, the Russian leadership determined the tactics had to change. The Russians abandoned the armor-centric planning approach. The urban environment forced the Russians to transform their doctrine during the operation to fit the situation. The adapted tactics placed infantry and Marine forces as the main effort. Later, experience and "white papers" reported that armored vehicles were best employed in supporting roles such as isolating city blocks, repelling Chechen counterattacks with fire and maneuver, and providing mobile cover to infantry from direct fire. The Russians adapted doctrine where mounted forces provided supporting fires along urban avenues of approach, where dismounted infantry controlled the immediate battlespace. When a combined arms force maneuvered, infantry forces led the formation. The armored vehicles moved in traveling overwatch of the

⁶⁶ Ibid., 96.

⁶⁷ Ibid., 95.

⁶⁸ Ibid., 97.

infantry. The Russian tanks moved at a distance outside the effective range of Chechen antitank weapons. The key was for the tanks to move close enough behind the dismounted infantry in order to provide effective machine gun fire.⁶⁹ As the Russians gained experience, they maneuvered more deliberately through Grozny's urban maze. The Russian forces learned to proceed much more methodically through buildings and down streets. The Russians began clearing one structure at a time instead of hastily moving to seize indecisive objectives in the middle of downtown Grozny.⁷⁰

The Russian leaders and soldiers also re-learned an old lesson of how psychologically stressful urban combat is. The battles in Grozny resulted in many severe cases of combat stress and psychological trauma. The Russian ground forces were not psychologically well prepared to fight a determined enemy, much less on urban terrain. As a result, Russian commanders adapted to the problem by establishing reserve forces in close proximity to the fighting during the mission. The Russians adapted their tactics to conserve combat power. They found units that survived the initial action quickly became psychologically ineffective. When this occurred, the Russian leaders inserted the standby reserves and relieved the main force. Experience in Grozny found this occurred after about three hours of intense urban maneuver and fighting. Some of the more stressful activities are clearing rooms in buildings, booby-traps, and obstacles. The stress and intensity of the urban combat forced a **second** organizational *transformation* centered this time on the establishment and placement of a reserve force.

Ultimately, the Russians found they had to task-organize and use combined arms assault detachments. The tanks supported these detachments and acted as a ready reserve close-by to counter losses or psychological exhaustion in order to clear and seize objectives. This adaptive Russian tactic eventually helped force the Chechens forces out of Grozny.

Conclusions

The battle of Grozny provides four relevant lessons for US Army leaders to contemplate

⁶⁹ Ibid., 97.

⁷⁰ Ibid., 96.

while creating future doctrine or training units for combat in an urban environment.

First, just as the Marines at Hue and the Israelis at Suez City, the Russians found that the combined arms approach that is trained and adapted to the enemy and the situation is critical for success. The preparation for successful urban combat has to begin in peacetime. The Russians attacked into a large urban area without a properly tailored or resourced force. Initially, this may seem surprising given that the Russians have more experience and doctrine for fighting in urban terrain than any other military. However, their leadership was not prepared for the violence and stress of protracted operations in a large city. The Russians went through several iterations of method and organization before achieving tactical victories.

Second, as the US Army discovered in Somalia, the most technologically advanced and best-equipped force does not always win. The Russians found that over reliance on technology in the form of firepower and protection are poor substitutes for adequate training and a determined will to win.

Third, the Russians failed at both tactical intelligence preparation of the battlefield as well as recognizing the significant cultural aspects of Chechen soldiers and civilians. The Russians learned hard lessons in the value of tactical and cultural intelligence in urban combat. Together, they are essential factors for success. In addition, the Russian force failed to understand the effects recent history and Chechen culture might have on the determination of the enemy combatants. They failed to grasp the effect a large noncombatant population can have on the battlefield. This prevented the Russians from gaining a comprehensive understanding of the enemy, establishing effective ROE, or implementing a targeted information campaign with a long-term strategy for success.

According to Tim Thomas, in the future:

“...Their (The Russian) preparation phase for urban combat probably will be comprehensive and exhausting in the future, since it is clear that Chechnya was not like Czechoslovakia. There will be more instruction on urban combat in their academies. The correlation of "other forces" (customs, religion, belief in the cause, receptivity to friendly forces, etc.) will be considered during the preparation phase, as will such factors as types of forces (guerrillas, regular, mercenaries), building materials, communications potential, local customs and

resistance, friendly forces available, and the use of chemicals. Understanding the elements and ramifications of urban combat is a difficult but crucial task for any army, but especially for one moving from a forward deployed to an expeditionary state. In the latter case, the tasks required to sufficiently sustain or support urban combat are enormous."⁷¹

Fourth, the Russians found that inconsistent or non-existent rules of engagement can turn the will and sentiments of the population against you and work to the benefit of the enemy. Focused, consistent, and well-understood ROE is effective in winning the information campaign.

Chapter Conclusions

From all three historical examples, several norms of urban combat begin to stand out. The first is that professional education and training of the leadership for urban combat is critical. Second, a force needs a coherent doctrine for conducting MOUT training. Third, units have to fight as combined arms team. Fourth, the force has to operate in smaller, decentralized units, where junior leaders must make quick decisions in vague and complex situations. Fifth, every leader has to understand both tactical and cultural intelligence preparation of the battlefield (IPB). An emerging characteristic and nature of the urban environment is the fragile relationship between the threat, ROE, IO, noncombatants, and the dramatic affect it can have on mission accomplishment.

Chapter III

Current Doctrine and Analysis

The Cold War Army's tactical doctrine concerning combat in cities warned against urban operations "unless the mission absolutely requires doing so."⁷² From all accounts on the consequences of urban warfare, this continues to be good guidance. However,

⁷¹ Thomas, 99.

⁷² Glenn, *Marching Under Darkening Skies*, 3. Glenn cites the 1976 publication of FM 100-5.

the Army may not always get a choice.

Future US Military operations will with increasing frequency, "absolutely require " missions in urban terrain.⁷³ Current Army tactical doctrine, based on WW II and Cold war examples, is archaic in its assumptions and thought.⁷⁴ For the most likely future combat scenarios, those of urban combat, there is no contemporary, comprehensive, or detailed doctrine for leaders to use.

Current professional dialogue, journal articles, and media stories suggest that America's Army may not be prepared for the challenges of MOUT.⁷⁵ Many reviews of current doctrine concerning operations in urban terrain suggest our literature on MOUT is lacking. In his introduction to "Marching under Darkening Skies", Russell W. Glenn addresses the question of whether or not the US Army is ready to conduct combat operations in urban areas. Glenn states: "Recent writings, a review of current doctrine, and unit training performances do not instill confidence that the force is prepared for the challenge (urban combat)."⁷⁶

Poor unit performance at the CTCs while planning for and conducting MOUT training supports suspicions of the Army's readiness to conduct urban warfare. "A considerable majority of units completing the Shugart-Gordon MOUT facility rotations at Fort Polk's Joint Readiness Training Center during the latter half of 1997 demonstrated critical shortcomings. ... Unsurprisingly, areas neglected or only poorly covered in doctrinal manuals were frequently those in which the units were weakest."⁷⁷ For the near future, the current sentiment and thought is that the results would be similarly disappointing if the Army conducted combat in a large city.

This chapter reviews current Army published doctrine for its contemporary

⁷³ Ibid., 4.

⁷⁴ Ibid.

⁷⁵ Edwards, 4. In his footnotes on this statement, Sean Edwards cites many authors that agree with his point of view.

⁷⁶ Glenn, *Marching Under Darkening Skies*, 4.

⁷⁷ Ibid., 13. This quote is from an interview by Russell Glenn of Michael Browder, US Army Joint Readiness Center, Fort Polk, LA on 17 September 1997.

relevance, robustness, and detail in terms of how well it can assist leaders preparing for the rigor and challenge of urban combat.

FM 100-5, 1993, *Operations*, last published in 1993, is the Army's cornerstone manual for defining operations.⁷⁸ FM 100-5 states urban operations "present unique and complex challenges."⁷⁹ It states that built up areas tend to affect/eliminate technological advantages and "can affect" the tempo of combat operations. Additionally it reads that US commanders must minimize civilian casualties and collateral damage. FM 100-5 describes that while in the attack, commanders should avoid terrain (urban areas) that will hinder a rapid advance.⁸⁰

FM 100-5 dedicates only one paragraph specifically to urban operations. Then, FM 100-5 refers the reader to FM 90-10, which the Army had published 14 years earlier. Conducting operations in urban terrain was not a high priority for the Army at that point in time.

The hierarchy of Army manuals that should provide supporting and additional doctrinal guidance for tactical leaders are FM 100-15 *Corps Operations*, FM 71-100 *Division Operations*, FM 71-100-2 *Light Division Operations* FM 71-2, *The Tank and Mechanized Infantry Battalion Task Force*, and FM 71-3, *Armored and Mechanized Infantry Brigade*. The Army's Corps and Division baseline doctrinal manuals should address how the urban environment or conditions affect each of the traditional operations. Additionally, these manuals should point out operating principles, situational considerations, and techniques for successful task organizing and planning. All these manuals fall short in delivering sound principles for conducting urban warfare.

FM 100-15 *Corps Operations* is the Army's doctrine on how leaders should organize and fight as a corps. The Army's newest version is the 29 October 1996 edition.

⁷⁸ The newest edition, known as FM 3.0 is nearing a final approval and publication date.

⁷⁹ Department of the Army, *FM 100-5 Operations*, (Washington, DC: US Government Printing Office 1993), 14-4.

⁸⁰ Ibid.

FM 100-15 does not mention MOUT as an environment or a condition of operation. It offers no guidance on how to organize for MOUT. Throughout the manual, several chapters cite examples of corps operations. However, there is not a single example of MOUT operations at the Corps level though the Army published it seven years after Operation Just Cause in 1989 and three years after Task Force Ranger's firefight in Mogadishu in 1993. In fact, FM 100-15 references MOUT one time on page 5-17 where it mentions light infantry and their capabilities. FM 100-15 states that, "Light infantry can conduct military operations on urban terrain (MOUT)."⁸¹ FM 100-15 does not mention how the conditions of urban terrain could affect Corps operations. Nor does it address the factors that commanders and staffs should take into account when planning for urban operations.

FM 71-100, *Division Operations*, published in August 1996, focuses primarily on how to organize and fight in open terrain. It has many clear sketches and supporting examples of how the division fights on open terrain. However, nowhere in Chapter 4 through Chapter 7, which covers Offensive, Defensive, Retrograde, or Other Operations are the considerations of conducting urban warfare mentioned. The closest to referencing MOUT or urban warfare is Operations Other Than War (OOTW). In Chapter 8, titled Operations Other Than War, FM 71-100 cites the Peacekeeping operation in Bosnia and provides some pertinent and relevant principles of OOTW. It describes considerations for the battlefield operating principles and staff planning assumptions for OOTW. Chapter 8 also describes the critical nature of Rules of Engagement (ROE). Effective ROE that evolves with the situation is clearly associated with successful urban combat. Even in the OOTW chapter, it does not mention that the decisive and/or shaping operations may occur around a city or least near the

⁸¹ Department of the Army, *FM 100-15 Corps Operations*, (Washington, DC: United States Government Printing Office 1996), 5-17.

preponderance of the population, which is normally within a city.⁸² In the end, FM 71-100 fails to describe the MOUT environment or its potential effect on combat operations.

FM 71-100-2 *Infantry Division Operations* is the Army's doctrinal manual for the employment of light, airborne, and air assault divisions. The Army published the current version of FM 71-100-2 in August 1993, shortly before Mogadishu. FM 71-100-2 attempts to describe the challenge and difficulties of urban warfare in Chapter 8-Environmental Considerations. Chapter 8 of FM 71-100-2 begins by describing MOUT as "complex,... and having unique challenges"⁸³ FM 71-100-2 embraces the requirement to conduct warfare on urban terrain. The manual states,... "They (urban areas) play an important role in the economic and political life of many countries. Consequently, there are many areas of the world where attack or defense of a city may be required."⁸⁴ FM 71-100-2 touches on the demands of leadership required while conducting urban warfare.

The manual describes the urban battlefield as "isolated", meaning that units fight smaller, independent and decentralized actions that require highly trained and cohesive teams led by competent, empowered, and entrusted leaders. The leaders fighting and directing their units in isolation must have strong moral courage and a positive attitude⁸⁵. Of course, it stops short of describing how the Army envisions training or developing these leaders for urban warfare. It only refers the leader to FM 90-10 and FM 90-10-1.

FM 71-100-2 provides a summary of MOUT tactics, techniques, and procedures for division-level operations. First, the manual describes the infantry division's role, capabilities, and general planning considerations. Next, it talks to the key aspects of

⁸² LTC Pat Butler, A British officer with experience in Northern Ireland as interviewed by Russell Glenn. LTC Butler, "believes that well-defined and understood ROE are the key to successful urban operations in peace and war." Copehill Down, UK, 11 Oct 1993. From Glenn, *Combat in Hell*, 17.

⁸³ Department of the Army, *FM 71-100-2 Light Division Operations*, (Washington, DC: United States Government Printing Office 1993), 8-1.

⁸⁴ Ibid.

⁸⁵ Ibid.

planning and task organizing for MOUT by a few of the battlefield operating systems. The manual does have some detail on the intelligence preparation of the urban battlefield (IPB) and the difficulties of command and control. FM 71-100-2 mentions weapons system roles and effectiveness for an urban environment. Additionally, FM 71-100-2 goes into some detail on defending from an urban area and attacking an urban objective. The manual also has several good sketches to portray the doctrinal concepts. It also describes the importance of tailored and adequate rules of engagement. Finally, the manual even describes a tactical concept of what the division should do by phases of an operation. In general, these concepts are helpful.

However, what is missing in FM 71-100-2 and the Army's Corps and Division(s) doctrine is the "how to" detail to understand or accomplish the critical aspects of conducting urban combat operations. FM 71-100-2 does not quite measure up as an effective "how to" manual. In the end, FM 71-100-2 takes on a WW II or Cold War attrition based perspective in defensive and offensive operations. The manual does not try to formulate a basis for creating a decisive operation, rather it leans toward, "a methodical house-by-house, block-by-block clearance operation" to accomplish the mission.⁸⁶ In other words, the manual lacks the vision of FM 3.0. It does not address all the battlefield operating systems, especially the significant contributors in the realm of information operations, such as the public affairs, civil affairs, and psychological operations forces. Ultimately, FM 71-100-2 is only marginally helpful in directing light infantry and mounted force leaders in preparing themselves and units to conduct urban warfare.

FM 71-3, *Armored and Mechanized Infantry Brigade*, published for the heavy brigade most recently in January 1996. FM 71-3 does not reference MOUT, cities, or urban terrain at all, although the Army published it after Somalia. More surprising is

⁸⁶ Ibid., 8-10.

that the Army FM 71-3 addresses the issue of light and heavy forces working together in Appendix C- Armored Operations with Light Infantry and Special Operations Forces. Appendix C has a chart on the first page that explains the combat effectiveness relationship of mounted and light forces over different types of terrain. The chart lists seven types of terrain across the horizontal axis. The chart does not mention urban terrain. It does list "close" but certainly does not define it. The point is that the heavy brigade-level doctrinal manual of the US Army does not account for MOUT.

Appendix C gives an obligatory mention to urban operations in its task list. When an Armored Brigade has a defend mission, the appendix states that a light battalion's task could be "conduct operations on urbanized terrain"⁸⁷ Conducting operations on urbanized terrain is not a task. MOUT is an environment or condition in which the Army conducts operations just like desert terrain. Furthermore, FM 71-3 does not mention the capabilities of information operations (IO). IO is critical in a protracted conflict in urban terrain where the center of gravity is likely the will of the local population.⁸⁸ As the Russians learned in Grozny, the sentiment of the population determines legitimacy of a force's operations. The will of the population either serves to prohibit or facilitates and supports the cause and actions of a determined enemy.⁸⁹

FM 71-2 *Armor and Mechanized Battalion Task Force* is the task force commander's guide to conducting operations. It offers fewer solutions and even less detail than FM 71-3. The current edition of FM 71-2 (Change #1) is dated 17 August 1994 and added Appendix A, *Mechanized Infantry and Armored, Light Infantry, and Special Operations Forces Operations*. Appendix A addresses both offensive and defensive operations in urban terrain. In the offense, mounted forces isolate the urban area, then seize a foothold, and finally support dismounted forces in clearing the

⁸⁷ Department of the Army, *FM 71-3 Armored and Mechanized Brigade Operations*, (Washington, D.C.: United States Government Printing Office, 1996), C-5.

⁸⁸ Edwards, xiv, Table 5 on page 43, and 51.

⁸⁹ General Scales Commentary from *The City's Many Faces*, Edited by Russell Glenn., 157-170.

objective. The appendix emphasizes that armor supports with direct fire and overwatches the dismounted infantry forces.⁹⁰ When defending urban terrain, mounted forces initially fight a delaying action along avenues of approach leading to the urban terrain. Then they conduct a perimeter defense just outside the city. Finally, mounted forces support the operation within the city, by transitioning to a reserve force or reinforcing a strongpoint.⁹¹ The appendix recognizes the decentralized and isolated nature of urban operations and considers decentralizing command and control down to the squad and crew level. "FM 71-2 is the first place doctrine considers the employment of single tanks for direct-fire support of the infantry, but favors armored vehicles Operating in pairs."⁹²

FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force, and Company/Team* is a tactical operations "how to" manual for mounted force commanders, staffs, and leaders from company through brigade. The current version dates 30 September 1992. FM 71-123 enjoys many favorable reviews for addressing combat offensive and defensive operations against a soviet-style enemy organization in non-restrictive terrain.⁹³ FM 71-123 does not specifically address urban warfare. What it attempts to describe is how mounted forces should integrate light and heavy units.

In Appendix B- Integration of Heavy, Light, and Special Forces, FM 71-123 describes special operations forces' capabilities and limitations. Appendix B quickly mentions the elements information operations of civil affairs and psychological operations forces. Appendix B addresses the challenges and considerations of brigade level down to company headquarters comprised of a heavy and light task organization.

⁹⁰ Department of the Army, *FM 71-2 Armor and Mechanized Infantry Battalion Task Force w/C1*, (Washington, D.C.: United States Government Printing Office, 1994), A-28.

⁹¹ *Ibid.*, A-30.

⁹² Curtis A. Lapham, *Colossus on Main Street: Tactical Considerations of Heavy Armor and Future MOUT Doctrine*, MMAS, School of Advanced Military Studies, Ft Leavenworth, KS. (1996), 17.

⁹³ This from the author's experience listening to COL, LTC, and MAJ Armor and Mech Infantry Commanders, Operations Officers, and Observer/Controllers discuss *FM 71-123*.

The manual describes the problems of integrating the battlefield operating systems. Appendix B even details some of the weapon systems hazards posed by heavy and light forces operating together. A good example is the hazard to dismounted personnel created by tanks and Bradleys firing sabot rounds. FM 71-123 does a good job explaining how to task organize and integrate both types of forces. FM 71-123 has a section on light and heavy forces attacking in urban terrain. However, FM 71-123 again focuses on an attrition style form of warfare. It fails to consider attacking or defending a large metropolitan area inhabited by hundreds of thousands or even millions of people. FM 71-123 offers a little better guidance for leaders, but simply not enough. The manual is insufficiently detailed for planning, preparing, and executing brigade through company level urban warfare.

FM 71-1 *Tank and Mechanized Infantry Company Team* is the Army's doctrine for company team leaders. Published in January 1998 it is the Army's most current doctrinal manual for the mounted force. This manual is a full of detail for just about all tactical operations that a company team commander could expect to face. The manual addresses MOUT in Appendix I- Military Operations on Urban Terrain.

Appendix I describes the urban environment, how to organize, and the planning considerations concerning company level leaders. Although the manual's appendix lacks the necessary detail to be truly valuable in preparing for urban operations, it does contain several substantive comments.⁹⁴ The "substance" within the appendix describes vehicles and equipment capabilities and limitations. It describes the challenges of commanding and controlling a decentralized operation. The manual also details how MOUT challenges fire support and strains logistics. Appendix I adds an additional phase to the scheme in describing the chronology of offensive urban warfare. It states the first phase as "reconnoiter the objective"⁹⁵ placing a

⁹⁴ Glenn, *Marching Under Darkening Skies*, 11.

⁹⁵ Department of the Army, *FM 71-1 Tank and Mechanized Infantry Company*, (Washington, DC: United States Government Printing Office, 26 January 1998), I-8.

premium on the significance of adequate urban intelligence preparation of the battlefield prior to and as a part of planning an attack against an urban objective. This phase is not present in any other of the higher organization's doctrine. FM 71-1 still focuses on traditional high intensity operations, not contemporary examples or future operations. In the future, a company team commander will have special operations forces, information operations forces, and military intelligence forces attached and task organized down to the section and crew/squad levels. "As always, but especially in urban interventions, area of operations intelligence will be of great importance, and CA (civil affairs) and PSYOP (psychological operations) units will be central participants."⁹⁶ The most recent and well-publicized example is the special operations and regular operations forces operating together in the 3-4 October 1993 firefight in Mogadishu.⁹⁷

The appendix does not describe the effect and importance of rules of engagement and views MOUT as a high intensity, but short duration action. In the future, company/team leaders may find themselves planning and conducting urban combat for an extended amount of time. Current manuals do not address the issue of a protracted urban fighting. Despite these shortcomings, FM 71-1 is still a useful document for the company team leader in preparing for MOUT.

For tactical doctrine in the specific environment of urban terrain, FM 90-10, *Military Operations on Urbanized Terrain* is the Army's current capstone doctrinal manual. The Army last published FM 90-10 in 1979.⁹⁸ FM 90-10 should provide a solid base and framework for leaders to train and prepare their units for combat in urban terrain. Additionally, this manual should be the combined arms foundation for individual branch manuals. The FM 90-1 series of Army publications thoroughly examines aspects of fighting using a Central European model.⁹⁹ Its age and focus on unconstrained WWII style combat in European cities against a non-existent soviet threat

⁹⁶ BG John R. Groves, Jr., "Operations in Urban Environments," *Military Review*, (July-August 1998), 38.

⁹⁷ Glenn, *Combat in Hell*, 14.

⁹⁸ The newest version of MOUT doctrine, named *FM 3-06* is out in initial draft.

⁹⁹ Groves, *Operations in Urban Environments*. 38.

ensures its obsolescence. The urban situation, conditions, and environment that the manual attempts to provide direction for a vision of urban warfare that is no longer applicable or exists.¹⁰⁰

FM 90-10 fails to assist today's leaders in providing sound doctrinal guidance to prepare and execute MOUT. It offers no valuable considerations for managing civilian noncombatants, rules of engagement, or any limitations of combat power.¹⁰¹ The manual explains that urban combat must be a combined arms fight, but offers little in the form of how light, mechanized, artillery, engineer, and aviation forces should operate together. Guidance for the incorporation of separate branches is weak. The manual covers the description of weapons effects in urban areas, infantry weapons and mounted force operations in two pages.¹⁰²

A supporting manual to FM 90-10 is FM 90-10-1, *An Infantryman's Guide to Combat in Built-up Areas*. This manual is the Army's best effort in providing tactical leaders and units a 'how to' manual. FM 90-10-1 is more thorough than FM 90-10 concerning conducting operations in urban terrain.¹⁰³ "MOUT is expected to be the future battlefield in Europe and Asia with brigade and higher level commanders focusing on these operations."¹⁰⁴ FM 90-10-1 is the first manual that attempts to guide or teach a tactical leader how to fight in urban terrain. The manual endorses combined arms and states what leaders can expect armor to accomplish in urban terrain as part of a combined arms team. FM 90-10-1 encompasses the urban conditions of large Third World cities as opposed to the "classical" western European vision of urban terrain. On the other hand, it does not describe how the shantytowns or highly populated slums of Third World city environments affect military operations. FM 90-10-1 does not provide

¹⁰⁰ Glenn, *Marching Under Darkening Skies*, 9.

¹⁰¹ Ibid., 9.; and a review of Department of the Army, *FM 90-10 Military Operations on Urbanized Terrain (MOUT)*, (Washington, DC: United States Government Printing Office, 1979).

¹⁰² Ibid.

¹⁰³ Ibid., 10.

¹⁰⁴ *FM 90-10-1 An Infantryman's Guide to Combat in Built up Areas*, 1-1.

the overarching combined arms doctrine in guiding how infantry, armor, and all the supporting branches should organize and fight together in urban terrain, because it really is only an infantryman's guide.¹⁰⁵

Conclusions

The analysis of current doctrine suggests that the Army ignores the requirements of urban warfare except for limited stability and support operations described in most current doctrine as operations other than war (OOTW). The recurring problem with current doctrine is it fails to describe urban combat. When Army doctrine does attain some detail, it focuses on what the unit *should* do, rather than “how” to do it. In fact, the word 'should' proliferates the pages of what little Army MOUT doctrine does exist. As Army doctrine narrows in organizational focus, it does a better job of addressing MOUT but does not integrate the planning process and necessity to prepare for MOUT from top to bottom. For example, the most current Army MOUT doctrine may be useful for a tank platoon leader; it offers very little guidance for heavy battalion or brigade operations officer to initiate planning.

None of the current doctrinal manuals has an adequately detailed chapter or annex that adequately addresses MOUT. Michael Dormeyer writes that, “..the armor and mounted force do not have the proper doctrine to train and execute armor and mechanized operations in MOUT.”¹⁰⁶ Current doctrine offers considerations, not real solutions. It fails to address specific task organization down to the squad and section level, combined arms formations, or movement techniques.

Armor training doctrine does not have a standardized method to include MOUT training in gunnery qualification or platoon or company level Situational Training Exercises (STXs). “The Army's current manuals, taken as a whole, provide the broad doctrinal 'what to do', but not the implementing tactics, techniques, and procedures-the

¹⁰⁵ Glenn, *Marching Under Darkening Skies*, 11.

¹⁰⁶ Michael J. Dormeyer, *Adequacy of Doctrine for Armor in MOUT*, master's thesis, Command and General Staff College, (1983), 103.

'how to' for the use of armor in MOUT at the battalion task force level and below."¹⁰⁷

Where Army doctrine does attempt to provide guidance on urban warfare, the current doctrine primarily focuses on the tactical level of operations. It portrays urban warfare as essentially a short and limited series of small-unit combat actions designed to clear and seize individual rooms, buildings, and city blocks. Just about every Army doctrinal manual assumes the fight is for control of a small town or just several blocks of a larger one. Army doctrine does not provide Corps or Division commanders and staffs guidance for the conduct of large-scale land operations in a huge and complex third world metropolis. No adequate doctrine is available for Army forces required to plan, prepare, and conduct a land component command's shaping, sustaining, and ultimately decisive operations in order to defeat an indigenous threat that thrives in an environment of cement and mortar.

Chapter IV

The Requirements and Demands of Leadership in Urban Combat

The most contemporary vision of war has America's technologically superior force combating an under-resourced, but determined enemy in an environment heavily influenced by urban terrain, political constraints, and a large noncombatant population. Urban combat is terribly violent, requires a robust force, and consumes vast resources.

Urban operations require leaders to understand "special considerations" inherent in the environment. The leaders of the US Marines in Hue, the IDF in Suez, and the Russians in Grozny all had to learn these special considerations first hand in combat, not as part of a systematic professional development philosophy prior to the conflict. Today's mounted force leaders need to understand the lessons of these historical battles as well as an expanded array of tactical challenges for the future. These considerations

¹⁰⁷ David B. Hain, *Sufficiency of Doctrine for the use of Armor in Military Operations on Urban Terrain*, monograph, School of Advanced Military Studies, (1994), 104.

are: command and control of decentralized operations, how the dynamics of noncombatant populations affect operations, the integration of non-traditional combinations of forces and skills into their units, and finally, the conduct of operations according to the ROE.

Army leaders have to understand how the urban environment coupled with political and humanitarian constraints impact operations. Urban combat requires mounted force leaders to operate independently and react quickly to rapidly changing conditions in order to solve complex problems that demand immediate solutions. In his work, Combat in Hell, Glenn states that:

“...effective urban warfare requires special considerations yet manifest many of the same characteristics as successful warfare in other environments. Basic principles of tactics and leadership remain viable despite the fundamental differences in environment and greater risks of friendly casualties...”¹⁰⁸

Current Leader Development Philosophy.

In the Army's formal educational institutions, training centers, and maneuver units, the focus of tactical leadership development centers on planning, preparing, and executing Cold War-style engagements and battles on linear battlefields in open terrain.¹⁰⁹ Typically, these training exercises clearly define the threat and configure it in a mechanized or light organization. The Army's institutional education system and mounted force culture of professional development does not ingrain the urban warfare requirements into its leaders and soldiers.

The Army's current system of professional education does not stress the complexity or likelihood of urban combat. Furthermore, it is neither structured nor sympathetic toward teaching the requirement of urban combat to its leaders. The Army's professional development mechanisms, both formal and informal, should educate and mentor leaders to use flexible and nontraditional information sources and decision-

¹⁰⁸ Glenn, *Combat in Hell*, 11.

¹⁰⁹ Dr. John Hillen, Center for Strategic and International Studies, PBS Frontline video, *The Future of War*, 2000.

making approaches when confronted with the challenges of MOUT.

In the future, successful Army leaders will have to be flexible, agile, and multifunctional while commanding units in urban situations. Decision-making in urban combat requires conceptual problem solvers with the ability to see how decisions and actions play out in the form of secondary and tertiary effects. Currently, the Army's doctrine and formal leadership development programs are not structured to teach these skills.¹¹⁰

Adaptability is an important leadership trait. The ambiguity and uncertainty of urban combat requires leaders adapt to constantly evolving conditions and scenarios. The Army has to foster and reinforce this trait at every level of command. We must strengthen and expand the leader development opportunities we make available to our junior commissioned and noncommissioned officers to prepare them for varied, distributed nonlinear urban operations. The flatter organizations necessary for future urban operations will give junior leaders far greater decision making responsibilities than they have today. They must develop the skills necessary to see and respond to a broad range of time-sensitive challenges. "They will have access to a relatively small number of personnel with an extensive array of weaponry, including nonlethals, that they will have to employ in a variety of difficult scenarios."¹¹¹ Junior leaders must therefore develop a high level of trust and confidence in both their selves and in the capacities of their subordinates.

The Marines have begun a comprehensive review of the future of urban combat and have identified some of the characteristics of urban combat in the future. More importantly, the Marines have a dialogue concerning the attributes future leaders need in order to succeed. "GEN Krulak, the previous Commandant of the Marine Corps described the future of war called the "Three-block war." "In simple terms, we believe a

¹¹⁰ Drake, 219.

¹¹¹ Hahn and Jezior, 82.

Marine (soldiers as well) will be engaged in humanitarian assistance at sunrise, peacekeeping at noon, and conventional combat at sundown. These three activities will all occur within a three-block area on the same day.”¹¹² The Marines see the need to focus on recruiting, training, and education in order to prepare for future combat. The point is that these non-traditional, but emerging demands require more leader and soldier development than our current formal education and training system is prepared to impart. The Marines understand the investment required to develop leaders that can succeed in the “three block war.”

“The challenges a young NCO will face in the three-block war demand intelligence, creativity, resilience, and a strength of character. These traits and characteristics must be nurtured and developed through a demanding training and education curriculum. Such a curriculum must emphasize leadership, integrity, courage, initiative, decisiveness, mental agility, and personal accountability. We must provide our NCOs with the training and education that will enable them to successfully negotiate the obstacles of the three-block war.”¹¹³

The Marines appear to have a grasp of what leadership skills will be required and that the junior leaders will make critical decisions and have to take bold actions in future urban combat. The Army needs to shift the focus of its tactical leadership development from the Cold War to the war of the future, the urban war.

Command and Control of Decentralized Operations

Leaders at all levels must be prepared to operate in an environment that, by its very nature, presents them with a much greater degree of decentralization and variation. They must also be capable of responding to the rapidly changing, multidimensional situational awareness requirements that will dominate urban operations. Success will depend on the initiative, skill, and discipline of first line leaders and young soldiers. “Leaders must be competent and confident in their MOUT skills and must have the courage to accomplish their missions while isolated from their parent units. Soldiers and leaders require mission-type orders that are restrictive in nature but that allow for

¹¹² GEN Terrance R. Drake, “The City’s Many Faces: Investigating the Multifold Challenges of Urban Warfare,” Appendix G, *The City’s Many Faces*, Edited by Russell Glenn, 197-224.

¹¹³ Drake, 217.

decentralized execution."¹¹⁴

The lessons of these examples are many, but the core challenges come down to a few points. Mounted warfare in non-urban environments goes very fast, and will go faster. Traditional control measures are inadequate. Battlefields quickly become cellular and multi-directional, and therein lay more opportunities than danger for the force with informational superiority and leadership that is unafraid of subordinate initiative. While rigorous training and equipment quality are important, the essential variable is situational understanding (SU). Practical SU is not only seeing the enemy before he sees you, but a commander's visualization that allows a leader to understand the physical reality of the enemy and the situation over space and time.¹¹⁵

Even with the "emptying" of the modern battlefield, organizational behavior in the field strives for lateral contiguity and organizational integrity. The incongruent battlespace of urban terrain fragments units and compartmentalizes actions, counteractions, and engagements. The leader's span of control can quickly disintegrate and it is very difficult to regain. Additionally, leaders find difficulty in maintaining an accurate picture of the multidimensional battlefield after making contact.¹¹⁶ Therefore, leaders have to make decisions more rapidly and with less information.

Understanding the effect of the Noncombatant Population

Current Army doctrine describes the civilian population of an urban area as hapless spectators.¹¹⁷ Future editions of FM 90-10 must recognize that people are the essence of a city and that they most likely have a decisive impact on an urban operation, especially over the long-term. As with any operation understanding the enemy and the terrain in relation to friendly forces and the situation is paramount to success. In urban warfare,

¹¹⁴ CALL Special MOUT Considerations and Lessons Learned, 11.

<http://call.army.mil/call/homepage/mout.htm>, viewed 10/10/00

¹¹⁵ Ralph Peters, "The Future of Armored Warfare", *Parameters*, XXVII, no. 3 (Autumn 1997), 51.

¹¹⁶ Ralph Peters, "Our Soldiers: Their Cities", *Parameters*, XXVI no. 1 (Spring 1996), 45.

¹¹⁷ FM 90-10., 5-5 through 5-8.

cultural intelligence of the enemy and the urban population is just as important. Leaders need to understand the sentiments and attitudes of the noncombatant population will affect the operational success of any mission. Noncombatant populations rarely remain neutral. Therefore, leaders need to understand the ramifications of inflicting noncombatant casualties, significant collateral damage, or critical city infrastructure.¹¹⁸ In the battle of Grozny, the Russian ground forces failed to grasp this philosophy and never isolated the Chechen defenders from the population. The conduit to achieving support of the population is through cultural awareness and successful information operations.

“Leaders have to understand the utility of information operations. Information Operations can be used to dislocate or separate an enemy seeking to deliberately Fight in a city, from public or logistical support that might normally be offered by the population.”¹¹⁹

Civilian considerations form the foundation for MOUT planning. Civilian considerations drive the use of fires, choice of maneuver “corridors,” and designation of nodal objectives. Leaders must know how to employ IO to separate the threat from the urban population.¹²⁰ “Given the proliferation of media sources within most urban areas, the use of offensive IO, specifically tailored to address regional cultural and political concerns, can have a significant impact on the attitude of the civilian population.”¹²¹ Even when the noncombatant population is anti-US, leaders have to use offensive IO in a preventative and proactive effort in to create conditions to successfully operate. Ultimately, the Army uses IO to influence the noncombatant's perceptions and enemy's emotions, motives, reasoning, and behavior.¹²² When executed successfully, this effort can convert hostile populations into neutral audiences as well as ensure that neutral

¹¹⁸ LTC Mark Reardon, The “new” FM 90-10 Military Operations on Urbanized Terrain slide presentation at the RAND Arroyo-MCWL-J8 UWG Urban Operations Conference, 13 April 1999. Found in Annex 2 of Appendix M from *The City’s Many Faces*, Edited by Russell Glenn. Discusses evolving changes in MOUT philosophy, 396.

¹¹⁹ Reardon, from *The City’s Many Faces*, 396-397.

¹²⁰ Ibid.

¹²¹ Ibid., 396.

¹²² Edwards, 48.

audiences remain neutral.¹²³

Integrating Forces into Effective Combined Arms Teams

In the future, combat forces will have to be task organized in nontraditional ways to accomplish their objectives. Leaders have to push all the required tools down to the lowest tactical level. "A light infantry company commander could find himself with a tank section, Bradley section, 155mm SP section, chemical smoke section, engineer platoon, ambulance section, CA team, MI interrogators, linguists, transportation section, and other assets, such as PSYOP teams."¹²⁴ Leaders have to understand how to integrate and incorporate these forces properly in order to synchronize these with conventional forces to achieve the fullest "non-traditional" effects

"Combined arms fighting in urban areas will likely require integration of units historically not considered front-line support elements in other environments. Civil affairs and psychological warfare units are generally seen as elements whose task limit their periods of proximity to enemy forces. Successful urban combat demands reconsideration of this mind-set, especially if friendly commanders (leaders) want to minimize noncombatant losses or obtain civilian help in facilitating mission accomplishment."¹²⁵

Leaders at all levels will also be required to engage in extensive cross-cultural communications and to integrate many interagency and nongovernmental organizations into military operations. The Army's professional development model should familiarize leaders to a larger scope of nonmilitary organization cultures and their capabilities and requirements throughout every stage of professional military education.

Understanding and Managing Rules of Engagement

Another difficult challenge for leaders is to know when a target is legitimate. Leaders have to understand and convey the intent of the Rules of Engagement. Subordinate units have to believe they can survive and accomplish their mission under the constraints. Soldiers should not feel at a disadvantage in regards to how the enemy

¹²³ Ibid., 397.

¹²⁴ Ibid., 400.

¹²⁵ Glenn, *Combat in Hell*, 15.

fighters. Designating a legitimate target at any point and time in urban warfare can be difficult for leaders. The units that know their leader's intent are more confident, aggressive, and successful compared to the units executing poorly defined missions. "ROE can be frustrating for both leaders who create them and the men who apply them with weapon in hand. They are nonetheless essential in distinguishing between acceptable and other targets."¹²⁶

Doctrine should also include more consideration of rules of engagement (ROE) appropriate to force capabilities and strategic objectives. In his "Combat in Hell", Glenn states:

"Constraints imposed by stringent rules of engagement exacerbate a commander's problems. FM 90-10, MOUT, the Army's keystone urban warfare manual, relies on World War II tactics generally ill-suited to situations requiring minimization of noncombatant and infrastructure losses. Political and public pressures render such doctrine increasingly outmoded. The United States requires changes to doctrine, training methods, and technologies to provide its forces with the capabilities necessary to effectively conduct future urban combat."¹²⁷

The need to develop and promulgate clear, flexible ROE is critical.¹²⁸ An "...element of this preparation would be to train soldiers and Marines in the application of what one (leader)... called 'the switch,' an instantaneous transition from one type of behavior and mind-set to another as demanded by the situation."¹²⁹ This requires experience and great latitude for honest mistakes. Soldiers cannot operate in constant fear that their actions however forthright may bring punitive repercussions. "Leaders must allow for imperfect but well-intentioned soldier judgment."¹³⁰ Maintenance of morale and force effectiveness disallows an environment wherein the soldier fears punishment should the

¹²⁶ Ibid., 17.

¹²⁷ Glenn, *Combat in Hell*, p. vii.

¹²⁸ Ibid., 16.

¹²⁹ Found in Russell W. Glenn's, *Denying the Widow-Maker*. A summary of proceedings from the 1998 RAND-DBBL Conference on MOUT. The author footnotes a LTC Tony Cucolo who used the term during his presentation "MOUT in Bosnia: Experiences of a Heavy Task Force, December '95 to December '96."

¹³⁰ Mark S. Martins, "Rules of Engagement for Land Forces: A Matter of Training, Not Lawyering," *Military Law Review*, No. 143 (Winter 1994), 1-160. Found on page 17 of Glenn's *Combat in Hell*.

instantaneous decision demanded by survival not be a perfect one.¹³¹ Leadership oversight of ROE is an art, not an exact science. There may be no substitute for experience, but leaders have to understand these constraints and how they affect operations. Leaders have to understand the relationship between IPB, IO, ROE, and noncombatants in the urban environment. In urban warfare, cultural IPB is just as important as tactical intelligence. Leaders must know the operational and tactical aim of the information operation campaign. They have to understand how their actions can affect those objectives. In addition, leaders must realize how their decisions and actions can quickly change perceptions by the media and noncombatants. These perceptions can lead to changes in ROE, further constraining methods of operations. The urban environment inextricably links the culture, enemy, media, IO, ROE, and the noncombatant population.

The future requirements of Army's junior leadership will be the significantly more complex than in Cold War scenarios. Junior leaders must have the ability to make rapid decisions based on continuously changing situations, integrate and orchestrate a broad array of capabilities, understanding the effects of noncombatant populations, effectively manage ROE. Furthermore, junior and field grade leaders will have to train and learn to trust subordinates to execute decentralized operations. These skills may be different from the ones we use to qualify weapons systems on Table VIII, but they are just as critical for urban combat.

Chapter V

Analysis: Comparison of Doctrine, Training, and Leader Development with Future Requirements.

Most of the intellectual energy involved in the future of the Army and transformation centers on organizations and combat platforms. The central idea behind

¹³¹ Glenn, *Combat in Hell*, 17.

transformation is to develop an Army that is agile, deployable, and lethal. Army Transformation has two premises. First, the Army wants to field a force with a balanced mix of combat skills from traditional MOSs and combat support such as civil affairs, information operations, counter-intelligence, and PSYOP in order to remain relevant and capable across the spectrum of conflict. Second, the Army's equipment of choice will be an optimization of capabilities between deployability, survivability, and lethality. Future vehicles and equipment will seek the middle ground between current light forces lacking firepower and the capability to maneuver and heavy forces that the Army cannot quickly deploy.

Army transformation lacks momentum in the areas of specialized doctrine, collective training, and leader development for combat and other operations in complex urban terrain. Current doctrine for urban operations consists of sequential checklists of what ought to occur.

The junior and senior leaders of the transformed Army involved in future combat will succeed or fail based on how well they estimate and make quick decisions as the situation unfolds and evolves **AROUND** them. Training only a small portion of the force in urban combat will not be sufficient either. The preponderance of the force, mounted, light, interim, or objective, should routinely train as large units for urban operations.

The maneuver training centers and the Battle Command Training Program focus on traditional high intensity combat between large maneuver forces. The National Training Center at Ft. Irwin uses the same scenarios of high intensity combat as it did before the end of the Cold War. The Combat Maneuver Training Center at Hohenfels, FRG has evolved somewhat to incorporate urban operations due to the missions in Bosnia and Kosovo. However, CMTC changed because of necessity, not from a philosophical shift in how the Army should train units and develop combat leaders for future conflict. At

the Joint Readiness Training Center at Ft. Polk, LA light units train at the Shughart-Gordon MOUT site for a portion of their rotation, but armored and mechanized battalion and brigade headquarters and units do not get the same opportunity

From the perspective of urban combat, the Army's weakest area may be formal and informal leader development. The model for professional training leaders for combat has evolved incrementally. The Army's mounted force focuses on the qualification of tank and Bradley crews as well as subjective observations (or by the use of objective checklists) of how leaders plan, prepare, and execute high-intensity maneuver warfare with their assigned units. The mounted force uses proficiency in these two areas to determine combat readiness. During the Cold War, how effectively a platoon, company, or battalion could shoot holes in plywood or attack across open, rolling terrain might have been good indicators of readiness. In future urban combat, these benchmarks of skill and proficiency may be irrelevant. Skills such as negotiation and conflict resolution may be just as important as boresighting an Abrams tank.

The mounted force has a training and leadership development challenge. The mounted force does not have the requisite doctrine upon which to base its training for future combat. Therefore, the force is not sure how best to prepare our leaders for future combat. Consequently, the force stays with the status-quo training model until ordered to a Peacekeeping rotation to Bosnia, Kosovo, or some other contingency. Then the unit faces the reality of urban operations. Home station facilities and combat training centers do not have the resources to train large organizations for urban combat. The institutional schools continue to train leaders for operations on traditional battlefield scenarios. Finally, the mounted force culture might have difficulty imagining the future without a massive and decisive tank battle. Still, the issue lies in how does the mounted force prepare leaders for urban combat.

The Army transformation's center-of-gravity is in deciding what type of

organization it should field and what types of equipment should be in it. When in fact, the focus should be broader and encompass doctrinal development for urban combat. The mounted force should base collective training philosophy on the anticipated nature of future conflict and the requirements to prepare combat leaders to perform in that environment. Future doctrine, training, and leader development changes for the mounted force have to occur within the institutional schools, training centers, by unit leadership, and ultimately the mounted force's professional culture.

Chapter VI

Conclusions and Summary

“The advanced technology systems of the future will enable us to win the urban fight only if they are part of a broad effort that includes doctrinal innovations and fundamental changes in the way we organize, train, and equip our soldiers for urban warfare.”¹³²

Through a review of historical examples, an analysis of current doctrine, and an examination of the unit training and leader development philosophy, this monograph concludes that the mounted force is not ready to contribute to the next high-intensity urban conflict. Some armor and mechanized units could perform successfully in urban combat, but the reasons for their preparedness would be they are currently conducting or have recently completed peacekeeping duty. The mounted force will face difficulty contributing to the next urban fight until its professional culture embraces the potentiality of high-intensity urban combat. The mounted force culture's sentiments towards organizational structure, collective unit training, and leadership development have to change. “With the trends in urban growth, we can no longer assume that cities can be avoided. During combat, the population is not normally the immediate focus of the military commander. However, leaders cannot ignore their needs, because civilians will eventually become the focus of the urban operation.”¹³³

The Army's mounted forces must accept and ingrain the reality of urban combat into

¹³² Hahn and Jezior, "Urban Warfare and the Urban Warfighter of 2025", 85.

¹³³ Reardon, 397.

its culture. The Army must educate and train its leaders and soldiers in the environment of urban combat throughout their careers. The nonlinear environment of urban operations create a complex and a vast array of possible courses of action, options, constraints, limitations, force mixes, enemy compositions, legal issues, and city characteristics that have to be assimilated and understood. Leaders have to be competent in comprehending all these variables in order to plan, prepare, and execute successful operations. Overall, the most important point concerning urban combat may be that there is no "standard urban combat operation." Therefore, 'how' and 'what' US Army officers think about conducting operations on urban terrain has to be as flexible as the traditional way of conducting mounted combat in open terrain. Each situation is unique in regards to the threat, city, specific operational and tactical issues, and geopolitical considerations.¹³⁴

How the Army organizes, prepares leaders, and trains for military operations in urban terrain, will shape the nature of urban warfare in the future. The enhanced capabilities of future Army organizations must enable relatively small numbers of highly trained soldiers, led by very capable leaders, to defeat significant enemy concentrations conducting operations within the confines of large urban areas. Army forces have to accomplish their missions while minimizing collateral damage and the risk to US and noncombatant personnel.¹³⁵

The next time US forces engage in conflict it will not be against a traditional mechanized enemy arrayed linearly on a grassy European or Asian plain. The Army's next combat zone may likely be on complex urban terrain. The next urban fight may be high in tempo and intensity, and it may continue for a protracted length of time. In order to make a meaningful contribution; the mounted force must come to terms with the possibility. How the mounted force responds to the training and doctrinal issues in

¹³⁴ Thomas, 101

¹³⁵ Hahn and Jezior, 77.

preparing its leaders for tomorrow will influence the degree of success and the level of risk the Army will incur. Either the Army faces the issues of urban combat now, or it will assuredly face them at much greater cost in the future.

Bibliography

Government Publications

- Edwards, Sean J. A. W. *Mars Unmasked: The Changing Face of Urban Operations*
Santa Monica, CA: Arroyo Center RAND, 2000
- Gerwehr, Scott and Russell W. Glenn, *The Art of Darkness: Deception and Urban Operations*. Santa Monica, CA: Arroyo Center RAND, 2000.
- Glenn, Russell W. *The City's Many Faces: Proceedings of the RAND Arroyo MCWL-J8 UWG Urban Operations Conference April 13-14 1999*. Santa Monica, CA: Arroyo Center RAND, 2000
- Glenn, Russell W. *Combat in Hell: A Consideration of Constrained Urban Warfare*.
Santa Monica, CA: Arroyo Center RAND, 1996
- Glenn, Russell W., Randall Steeb, John Matsumura, Sean Edwards, Robert Everson, Scott Gerwehr, John Gordon. *Denying the Widow-maker: Summary of Proceedings, RAND-DBBL Conference on Military Operations on Urban Terrain*.
Santa Monica, CA: Arroyo Center RAND, 1998.
- Glenn, Russell W. *Marching Under Darkening skies: The American Military and the Impending Urban Operations Threat*.
Santa Monica, CA: Arroyo Center RAND, 1998.
- McLaurin, R D. and Paul Jureidini, David S. McDonald, Kurt J. Sellers. *Modern Experiences in City Combat*. Aberdeen, MD:
US Army Engineering Laboratory, 1987.
- McLaurin, R. D. and L. W. Snider, *Recent Experiences in Urban Terrain*.
Alexandria, VA: Abbott Associates, Inc., 1982.
- U.S. Department of Defense, National Military Strategy. Washington, D.C.: HQ Government Printing Office, 1997
- U.S. Department of the Army, Field Manual 7-7J, Mechanized Infantry Platoon and Squad (Bradley). Washington, D.C.: HQ Government Printing Office, 1993
- _____. Field Manual 17-12-1-1, Tank Gunnery (Abrams). Volume I, Washington D.C.: HQ Government Printing Office, 1998
- _____. Field Manual 17-12-1-2, Tank Gunnery (Abrams) Volume II, Washington D.C.: HQ Government Printing Office, 1998
- _____. Field Manual 17-15, Tank Platoon. Washington D.C.: HQ Department of the Army, 1996

- _____. Field Manual 22-100, Army Leadership. Washington D.C.: HQ Department of the Army, 1999.
- _____. Field Manual 34-130, Intelligence Preparation of the Battlefield. Washington D.C.: HQ Government Printing Office, 1994
- _____. Field Manual 71-1, Tank and Mechanized Infantry Company Team. Washington D.C.: HQ Government Printing Office, 1998
- _____. Field Manual 71-2, w/ C1 Tank and Mechanized Infantry Battalion Task Force. Washington D.C.: HQ Government Printing Office, 1994
- _____. Field Manual 71-3, The Armor and Mechanized Brigade. Washington D.C.: HQ Government Printing Office, 1996
- _____. Field Manual 71-100, Division Operations. Washington D.C.: HQ Department of the Army, 1996
- _____. Field Manual 71-100-2 Infantry Division Operations. Washington D.C.: HQ Government Printing Office, 1996
- _____. Field Manual 90-10, Military Operations on Urbanized Terrain (MOUT). Washington D.C.: HQ Government Printing Office, 1979
- _____. Field Manual 90-10-1, An Infantryman's Guide to Combat in Built-up Areas. Washington D.C.: HQ Government Printing Office, 1993
- _____. Field Manual 100-5, Operations. Washington D.C.: HQ Government Printing Office, 1993
- _____. Field Manual 100-6, Information Operations. Washington D.C.: HQ Government Printing Office, 1996
- _____. Field Manual 100-15, Corps Operations. Washington D.C.: HQ Government Printing Office, 1996
- _____. Field Manual 101-5, Staff Organization and Operations. Washington D.C.: HQ Government Printing Office, 1993

Books

- Adan, Avraham (Bren). *On the Banks of the Suez: A General's Personal Account of the Yom Kippur War*. Novato, CA: Presidio Press, 1980.
- Blank, Stephen J. and Tilford, Earl H. Jr., *Russia's Invasion of Chechnya: A Preliminary Assessment*. Carlisle Barracks, PA: Strategic Studies Institute Special Report, US Army War College, 13 JAN 1995.

- Bowden, Mark, *Blackhawk Down: A Story of Modern War*.
New York, NY: Atlantic Monthly Press, 1999.
- Clausewitz, Carl von. *On War*. Edited and translated by Michael Howard and Peter Paret
Princeton, NJ: Princeton University Press, 1976.
- Creveld, Martin van. *Military Lessons of the Yom Kippur War: Historical Perspectives*.
London, UK: Sage Publications, 1975.
- Dougan, Clark and Stephen Weiss. *The Vietnam Experience: Nineteen Sixty-Eight*.
Boston, MA: Boston Publishing, 1983
- Hammel, Eric. *Fire in the Streets: The Battle for Hue, Tet 1968*
Chicago, IL: Contemporary Books, 1991
- Kaplan, Robert D. *The Coming Anarchy: Shattering the Dreams of the Post-Cold War*.
New York, NY: Random House, 2000
- Nolan, Keith W. *Battle for Hue: Tet, 1968*
Novato, CA: Presidio Press, 1983
- O' Ballance, Edgar. *No Victor, No Vanquished: The Yom Kippur War*.
Novato, CA: Presidio Press, 1978
- Thomas, Timothy L., *The Caucus Conflict and Russian Security: The Russian Armed Forces Confront Chechnya*. Fort Leavenworth, KS: Foreign Military Studies Office, June 1995.

Articles

- Casey, Ken, "Urban Combat in World War II",
Armor Magazine, Nov-Dec 1999, 8.
- Groves, John R. Jr. BG, "Operations in Urban Environments"
Military Review, July-August 1998,
- Hahn, Robert J. II and Bonnie Jezoir, "Urban Warfare and the Urban Warfighter of 2025" *Parameters, US Army War College*, Summer 1999, 74-86
- Leaf, James D. CPT, "MOU and the 1982 Lebanon Campaign: The Israeli Approach",
Armor Magazine, July-August 2000, 8-11.
- Parish, Steven L., "Light Tap with a Strong Arm: Doctrine and Employment of Marine Corps Armor from 1965-75", *Armor Magazine*, Sept-Oct 199, 20.
- Peters, Ralph, "The Future of Armored Warfare"
Parameters, US Army War College, Autumn 1997, 50-59

Peters, Ralph, "Our Soldiers: Their Cities"
Parameters, US Army War College, Spring 1996, 43-50

Pierre, J. M. CPT, "The Urban Field Trains",
Armor Magazine, Nov-Dec 1999, 42.

Reese, Timothy LTC, "An Armor Battalion in Kosovo"
Armor Magazine, Nov-Dec 1999, 26.

Rogers, Glenn F. "The Battle of Suez City"
Military Review, Nov 1979, 29

Thomas, Timothy L., "The Battle of Grozny: Deadly Classroom for Urban Combat"
Parameters, US Army War College, Vol. XXIX, No. 2 Summer 1999, 87-101

Monographs

Davis, Mark A. *Armor attacks in Restricted Terrain: Is Current Doctrine Adequate?*
SAMS Monograph, First Term AY 95-96 School of Advanced Military Studies,
United States Army Command and General Staff College Fort Leavenworth, KS

Dormeyer, Michael J. *Adequacy of Doctrine for Armor in MOUT*.
Master's Thesis, United States Army Command and General Staff College Fort
Leavenworth, KS 1983

French, Mark R. MAJ, *The Armor Force in Contingency Operations: Do we have the
Right Tactical Doctrine?* SAMS Monograph, First Term AY 90-91 School of
Advanced Military Studies, United States Army Command and General Staff
College Fort Leavenworth, KS

Goligowski, Steven P. *Future Combat in Urban terrain: Is FM 90-10 Still Relevant?*
SAMS Monograph, First Term AY 94-95 School of Advanced
Military Studies, United States Army Command and General Staff College
Fort Leavenworth, KS

Hain, David B. *Sufficiency of doctrine for the Use of Armor in Military Operations on
Urban Terrain*, SAMS Monograph, First Term AY 94-95 School of Advanced
Military Studies, United States Army Command and General Staff College
Fort Leavenworth, KS

James, Thomas S. Jr. MAJ *Big Tank Little Bridge: Is there a Position on the Peace
Operations Team for Heavy Armor?* SAMS Monograph, First Term AY 96-97
School of Advanced Military Studies, United States Army Command and General
Staff College Fort Leavenworth, KS

- Johnson, Kevin D. MAJ *Intelligence Preparation of the Urban Battlefield*
SAMS Monograph, First Term AY 90-91 School of Advanced Military Studies,
United States Army Command and General Staff College Fort Leavenworth, KS
- Lapham, Curtis A. MAJ *Colossus on Main street: Tactical consideration of Heavy
Armor and Future Mout Doctrine* SAMS Monograph, First Term AY 96-97
School of Advanced Military Studies, United States Army Command and General
Staff College Fort Leavenworth, KS
- Mosher, Alan M. MAJ, *Light Armor in Deep Operational Maneuver: The New
Excalibur?* SAMS Monograph, Second Term AY 93-94 School of Advanced
Military Studies, United States Army Command and General Staff College
Fort Leavenworth, KS
- Mosher, Alan M. MAJ, *Light Armor MOUT Doctrine: Imperative Change or Business
as Usual?* SAMS Monograph, First Term AY 93-94 School of Advanced Military
Studies, United States Army Command and General Staff College
Fort Leavenworth, KS
- Moyer, William R. MAJ *Combat Failure: Nightmare of Armored Units Since World
War II* SAMS Monograph, First Term AY 91-92 School of Advanced Military
Studies, United States Army Command and General Staff College
Fort Leavenworth, KS
- Pittard, Dana J. H. MAJ *The Heavy Battalion Task Force in Mountainous Terrain:
Are Current Tactics, Techniques, and Procedures Adequate?* SAMS Monograph,
First Term AY 93-94 School of Advanced Military Studies, United States Army
Command and General Staff College Fort Leavenworth, KS
- Sangvic, Roger N. MAJ, *Battle of Mogadishu: Anatomy of a Failure.*
SAMS Monograph, First Term AY 98-99 School of Advanced Military Studies,
United States Army Command and General Staff College Fort Leavenworth, KS

Film / Videos

Frontline, *The Future of War*, PBS Public Television, 2000

Internet/ On Line Resources

Special MOUT Considerations and Lessons Learned, Center for Army Lessons Learned
Homepage.
<http://call.army.mil/call/homepage/mout.htm>